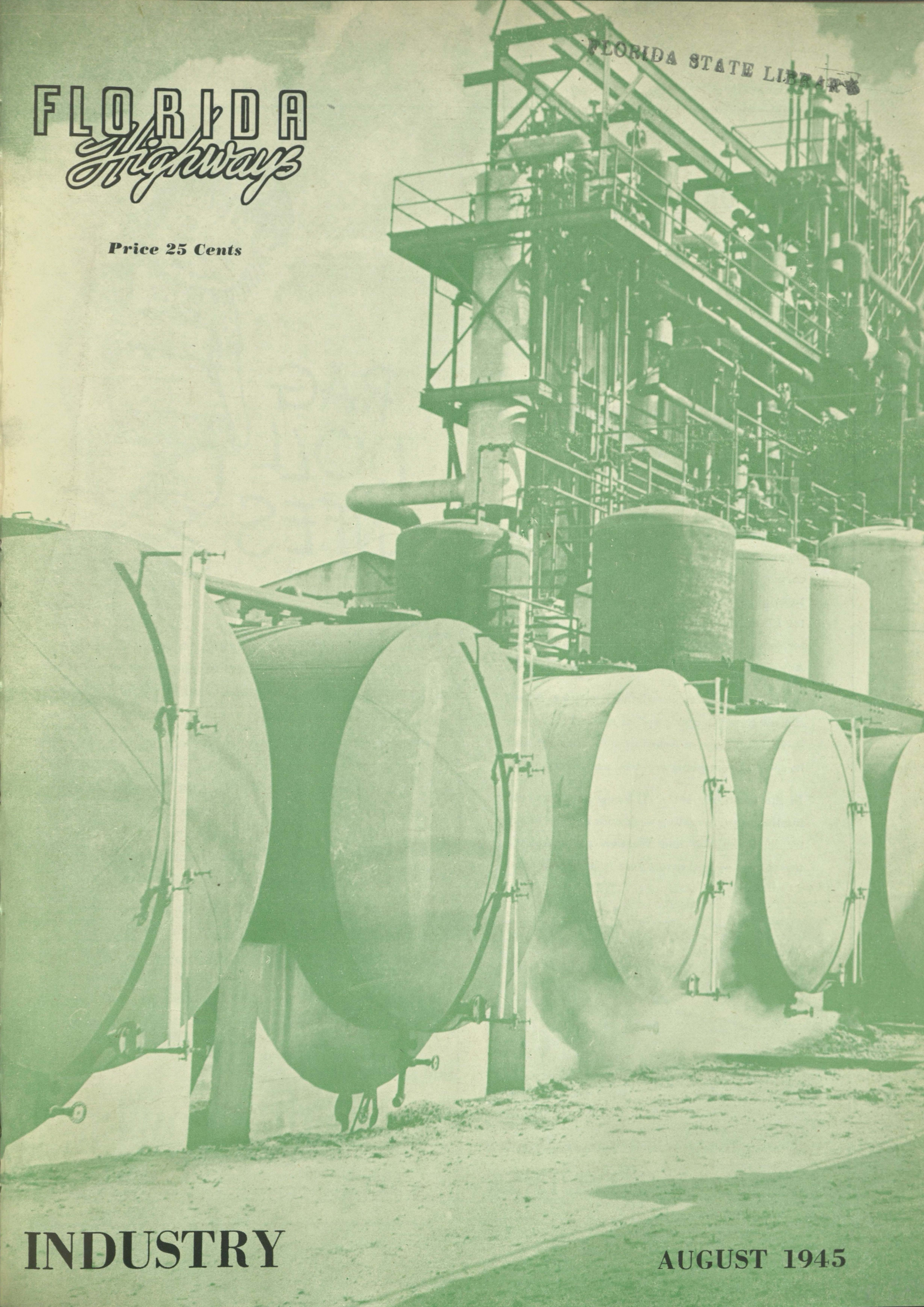


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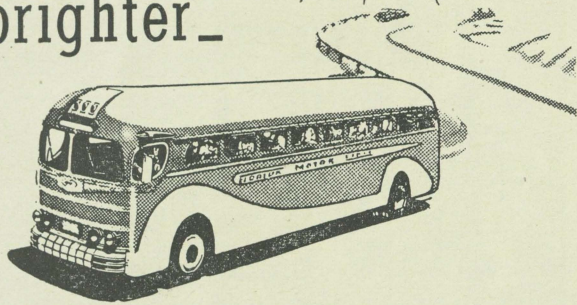


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AUGUST 1945



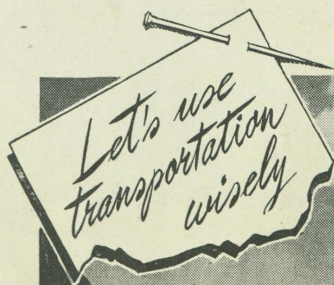
The road  
ahead  
is  
brighter\_



The sunshine of a great victory already beams across our pathways. And there's only one more corner to turn — then down the home stretch to bright futures and lasting peace. Florida Motor Lines is exerting every effort to provide better, smoother transportation for those millions of Americans intent upon finishing the war job.

As rapidly as war restrictions can be lifted, there'll be a "stepping up" of motor bus service — in frequency of schedules, in comfort and in speed. Great plans are even now in progress.

In the meantime let's all keep using travel intelligently... avoiding week-ends and the heavy traffic of holiday and vacation periods. Let's travel light — and invest heavily in War Bonds!



**FLORIDA MOTOR LINES**

RAG  
DOLL  
KNEES



**Y**ou know that sagging, sawdust feeling. It's a wartime symptom of the high cost of living. You often get it when you go to market or pay a bill.

But not when you pay your electric bill. For the price of electric service hasn't followed other prices UP. It's still at low pre-war levels—or even a little lower. In fact, if yours is an average family, you're getting just about **twice as much electricity for your money today** as you did 15 years ago.

We're glad we've been able to keep the cost of electricity **down** and, at the same time, provide friendly and dependable service—in spite of wartime conditions. That makes our hard work and careful **business** management seem worth while. And we are glad that it helps give you **some** relief from "rag doll knees!"

**FLORIDA POWER**  
CORPORATION

In the Service of Customer, Community and Country



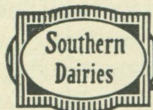
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### BALLENGER AUTO STORAGE, Inc.

V. G. Edgar, Mgr.  
LAKELAND, FLORIDA

Produced Under Laboratory Supervision



*Sealtest*  
**ICE CREAM**  
*and* **MILK**

SOUTHERN DAIRIES, INC.

Jacksonville, Florida

**"IF IT'S CAST METAL  
—WE CAN MAKE IT!"**

**FLORIDA'S  
PROGRESS  
Depends On  
FLORIDIANS!**

### OUR HIGHWAYS

#### MUST BE ADEQUATE!

● We live in an age in which a state that does not have an excellent highway system is a backward state. There is a direct relation between the prosperity of a state's citizens, and the highways of that state. The highways bring travel—which in turn pays for the highways.

● The C. I. Capps Co., Inc., endorses and commends the splendid progress made by our State Road Department. We sincerely hope that all Floridians will aid and encourage the development of our highway system, in keeping with the wonderful opportunities which lie ahead in the bright post-war years.

● CAPPS Highway Service Specializes in Crushers, Manholes and Covers, Drainage Gates, Fabricated Steel to specifications, Truck and Trailer Repair, Metalizing. Our competent and experienced design engineers provide expert service for special problems or machine design.



**The C. I. CAPPS CO., INC.**  
JACKSONVILLE, FLORIDA

Designer, Founders and Manufacturers of Special Equipment  
Since 1916.



# EDITORIALS

## FLORIDA FACES FORWARD . . .

**W**AGE EARNERS AND businessmen of Florida have been enjoying an unusual peak of prosperity that stems partly from the purchases of the large numbers of uniformed personnel and their families now in the State and partly from the payrolls of the large war industries. When the trainees and their families go home, when the war industries shut down, what shall we have left? Florida businessmen have been facing that problem and they have some answers ready.

First, to replace the uniformed personnel and their families, we shall have the tourists again. The number will no doubt be swelled by many of those who became acquainted with Florida's climate and recreational facilities while stationed here at naval and military installations. Because of wartime restrictions on travel and lack of housing space, the tourist flow to Florida has been a mere trickle. It stands to reason that residents of other areas who have planned to visit Florida and who have been unable to do so, will decide to come in force as soon as they can.

Second, we shall have our expanding agriculture and cattle industry. Citrus acreage has grown rapidly in recent years and the cattle industry is forging rapidly ahead. Market glut has been avoided by the development of many new ways to process and dispose of the citrus crop—juices, canned segments, concentrates, cattle feed, and fertilizer now move to market from the new processing plants. Vegetable, poultry, swine, dairy, and general farm products are of increasing importance in our economy.

Third, we shall have our industries. Some but not all of these must reconvert to peacetime processes and productions. There was a time when Southern industry in general and Florida industry in particular was dismissed with a shrug as trivial by those acquainted with industry on the Northern and Eastern scale. We do not yet have any industries as large as their largest but we have some that would be looked upon as respectable in any league. The paper and pulp mills such as those at Fernandina, Jacksonville, Panama City, Port St. Joe, and Pensacola would be noticed if they were anywhere in the North. The Swisher cigar factory at Jacksonville, the sugar mill at Clewiston, and the shipyards that dot our entire Atlantic and Gulf coast line are big enough to get attention in any State in the Union. We have, of course, been credited all along with some important plants handling lumber, naval stores, and other forest products; these were looked upon as the normal processing operations of a frontier region from whence heavy and raw materials are drawn. The newer developments industrially command for us respect in the realm of manufacturing finished commodities. This has been granted to us heretofore largely in the field of hand-made cigars for which Tampa is famous.

What of the future? Few of our industries except the shipyards must plan extensive reconversion. Most of the other industries are being held in check during the war and are ready and eager to rush into heavier production as soon as declaration of peace gives them the "go" signal. Starch and rum-producing plants are about to join the sugar mill in the lake area; the machine-made cigar industry at Jacksonville is straining at the leash and officials are not sure that as much labor as they will need will be available there; the pulp and paper mills are on war orders for the most part but will require little if any reconversion to shift over to peacetime production. The Newport Industry at Pensacola, which is developing a wide variety of commodities from pine products, is all set for expansion on a scale that will provide materials for several other industries in the area, setting a pace and showing the way to others who may develop similar productions elsewhere in the State.

The net conclusion is that when the shipyards reduce their payrolls other industries are ready to increase them. Shipyards may find uses for much of the equipment now being used to turn out vessels; some of them are planning sports and pleasure craft production, others may turn to fabricating storage tanks and other heavy goods; some may close down and junk what cannot be utilized. There will be, without question, a lag here and there in the utilization of available labor but there is no good reason to believe that readjustment cannot be made with a minimum of delay.

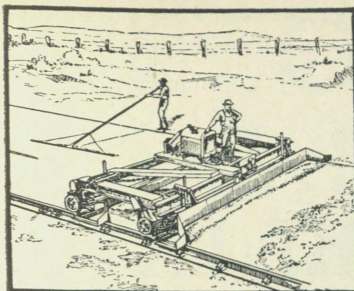
Florida is looking forward to a rapid increase in industrial production after the war. First, from the movement southward of established industries, and, second, from the new opportunities opened up by research, developing new commercial uses of raw materials.

The spinning and textile industries have already swept southward from New England. Automobile assembly plants and many other industries show signs of decentralization and southward movement. Removal of the Southern freight rate differential and Florida arbitrary, under the order of the Interstate Commerce Commission, tends to speed this movement and Florida should share in its benefits.

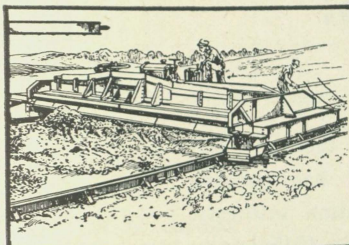
Meanwhile only the surface has been scratched in the potential uses of Florida raw materials. Industrial use of citrus processing waste, byproducts of sea food, livestock and other processing, has been proven but has not been fully realized. Commercial uses have been or may be found for such plentiful but unutilized materials as palmetto fibre, mangrove, blackjack oak, water hyacinth. Glass containers are already being made in Florida and rare minerals are recovered from beach sand. The State has many deposits of phosphate, Fuller's earth, ceramic clays, limestone, and other materials of wide usefulness. Tung nuts, ramie, lemon

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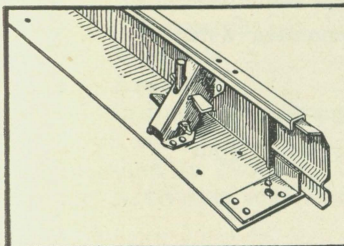




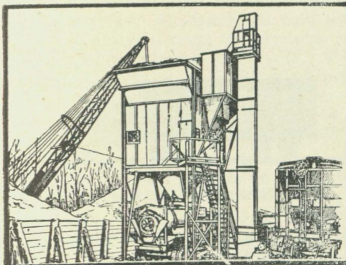
Paving Spreaders  
For Roads and Airports



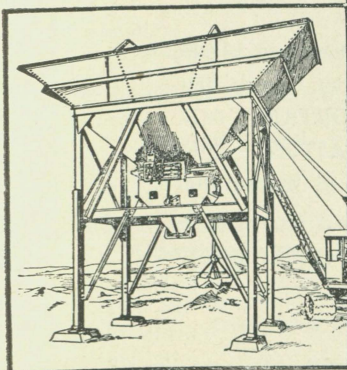
Paving Spreaders  
For Roads and Airports



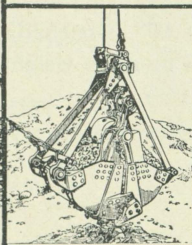
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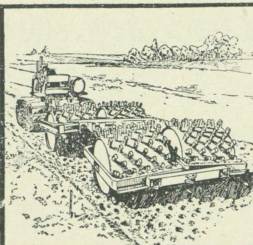
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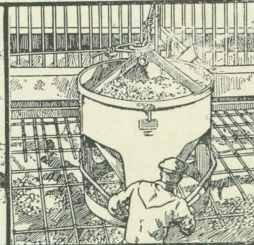
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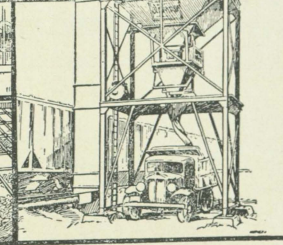
Clamshell  
Buckets



Sheep's Foot  
Tamping Rollers



Concrete Buckets



Bulk Cement Plants

# FLORIDA EQUIPMENT COMPANY OF

MIAMI . . . . . 658 NW. 6th Street  
JACKSONVILLE . . . . . 10 Stockton Street  
TAMPA . . . . . 626 Twiggs Street

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The Florida Equipment Company now has the exclusive distributorship for Blaw-Knox Construction Equipment for the entire State of FLORIDA, east of the Apalachicola River. They will handle your inquiries promptly and efficiently.

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**of Blaw-Knox Company**  
Farmers Bank Bldg., Pittsburgh, Pa.  
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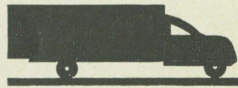
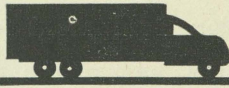
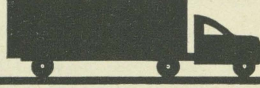
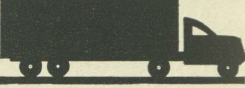
# HERE'S THE *New* INCREASED SIZE AND WEIGHT LAW Affecting ALL Florida Truckers!

● From the very start of the groundwork which today is a part of the new INCREASED SIZE AND WEIGHT LAW, the Florida Trucking Association has consistently "followed through" for its members. Constantly alert to Association interests, we worked on the passage or defeat of over 60 proposed Bills during the 1945 Legislative Session, each Bill having some bearing upon the welfare of the Florida Trucking industry. Our achievements through the Association members and representatives, together with the advice of the Association's Executive Legislative Committee are merely an indication that "united we stand; divided we fall."

● Shown below, is a resume of the INCREASED SIZE AND WEIGHT LAW, effective June 7, 1945. For further information about how this Law may affect your operations, write the Association Secretary.

## INCREASED SIZE AND WEIGHT LAW

### *A Pictorial Resume*

|   |   |   |  |   |
|---|---|---|--|---|
|  |  |  |  |  |
| Width<br>96 inches  | Length (Over-all, including<br>bumpers and load)                                    |   | Tractor-semitrailer  |   |
| Height<br>12½ feet  | Single Vehicles . . . 35 feet   | Single Vehicles . . . 35 feet   | Combinations . . . 50 feet   | Combinations . . . 50 feet  |
|   | Maximum Load: . . 2 axles<br>24,000 lbs.  | Maximum Load: . . 3 axles<br>40,000 lbs.  | Maximum Load: . . 3 axles<br>40,000 lbs.   | Maximum Load: . . 4 axles<br>60,000 lbs.  |

● The maximum weight per axle on any of the above vehicles must not exceed 18,000 pounds and the maximum weight per square inch of pneumatic tire cannot exceed 550 pounds. PASSAGE OF THIS BILL IS PERHAPS THE MOST IMPORTANT ACCOMPLISHMENT OF YOUR ASSOCIATION SINCE ITS ORGANIZATION. This change in law represents a fifty percent (50%) increase in gross weight of trucks and will result in an undeterminable sum saved our members.

This Act became law June 7th, 1945. COPIES OF THE COMPLETE BILL WILL BE SUPPLIED UPON REQUEST.

## FLORIDA TRUCKING ASSOCIATION, INC.

218 West Church St.

JACKSONVILLE, FLORIDA

Phone 5-3130



# FLORIDA HIGHWAYS

Official Publication of

**State Road Department of Florida—Florida Highway Patrol  
Association of County Commissioners—Florida Trucking Association, Inc.**  
*Authorized medium of Motor Vehicle Division and other State departments.*

VOLUME 13

AUGUST 1945



NUMBER 9

JOHN KILGORE, Tallahassee

Editor

J. E. ROBINSON, Winter Garden

Publisher

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A magazine of general circulation and general public interest dedicated to construction and improvement of Florida highways, to traffic safety, public education and all that these imply in the future development of Florida resources and possibilities. Not published at State expense. Manuscripts and pictures intended for publication should be addressed to the editor. Contributions of pictures and reading material are welcomed, but publisher accepts no responsibility for their loss. Permission is hereby given to newspapers and other publications to reprint material contained herein (unless specifically restricted in the title of the material) provided proper credit is given Florida Highways, Reg. U. S. Pat. Off. Subscription price, \$2.00 per year; single copies 25 cents. Published monthly and entered as second class matter July 11, 1941, at the postoffice at Winter Garden, Fla., under the Act of March 3, 1879.

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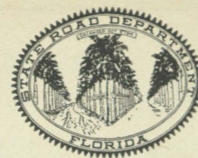
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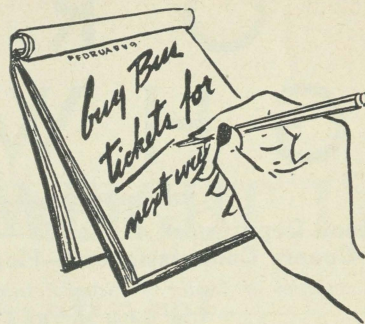
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CITRUS GROWING

CITRUS CANNING

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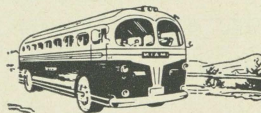
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# Florida Industry Is Ready . . .

**J**ACKSONVILLE IS looking forward to the post-war readjustment era with confidence—expecting no miracles but confident that, allowing for some lag in employment, reconversion will be smooth and steady.

It is estimated that Jacksonville requires the employment of 90,000 persons. A survey of plans for plant expansion and for potential industrial and service employment convinces Jacksonville planners that the expected investment of \$21,000,000 for space, repairs, and equipment, will contribute toward facilities that will, within a reasonable time, require the peacetime services of 90,000 employed persons. A sampling of 50 firms indicated that 36 expect to employ more persons after the war, 10 the same number and four fewer; the

50 firms employed 6,000 in 1940 and expect to employ 8,654 after the war.

A check on the plans of separate industries tends to bear out these encouraging expectations.

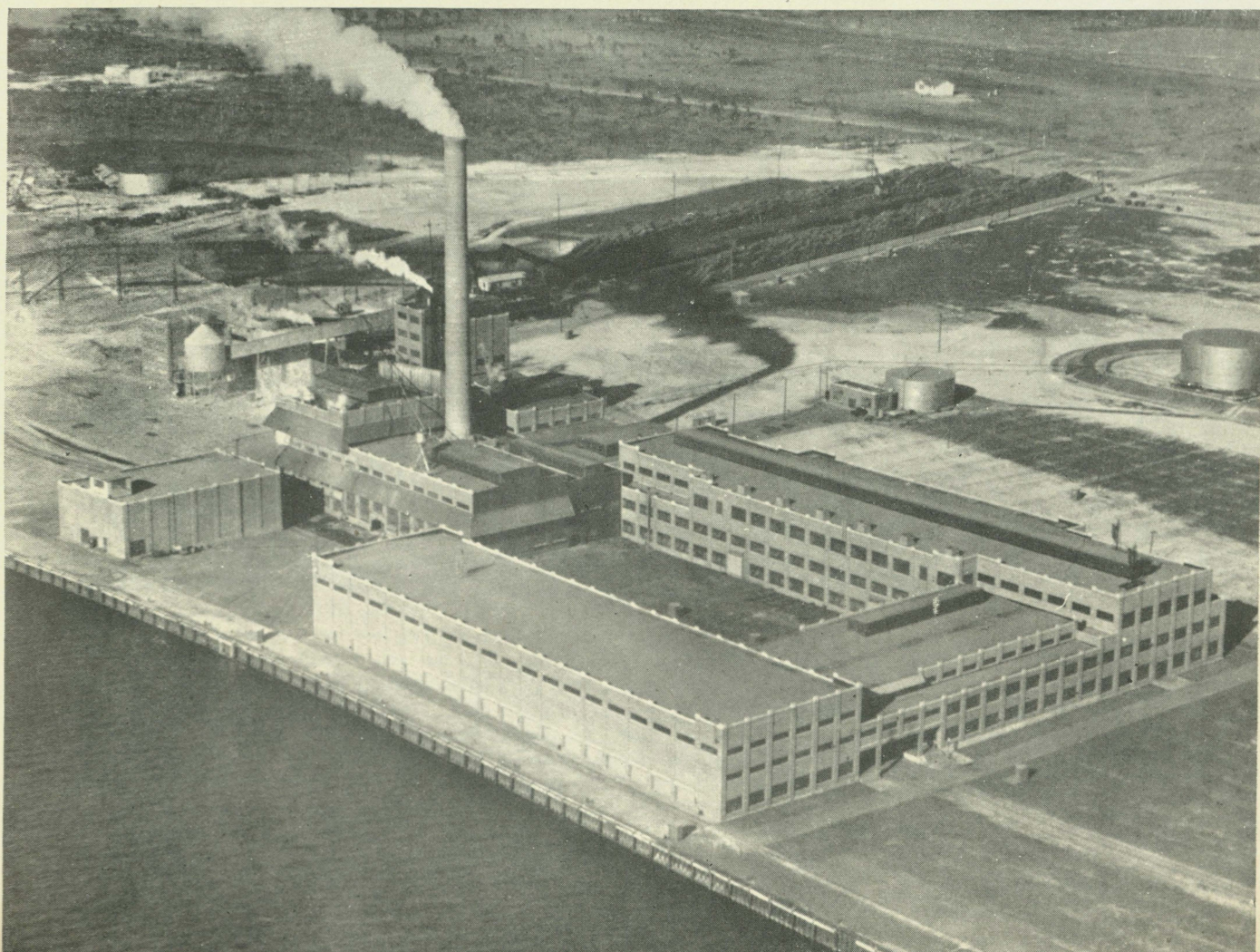
One of Jacksonville's and the South's newer industries is the manufacture of wood pulp, paper, and paper products. The National Container Corporation turned out paper and boxes before the war and now employs 400 on rush war orders. After the war this concern looks forward to a heavy demand for containers for furniture, hose, shoes, electrical equipment, and many other commodities, and expects to increase production of corrugated boxes. Employment is expected to gain with peace, and output to exceed that of 1944 when the plant, working 24-hours a day

on a 7-day week produced 35 carloads a day, 12,000 carloads a year, with a sales value of \$18,000,000.

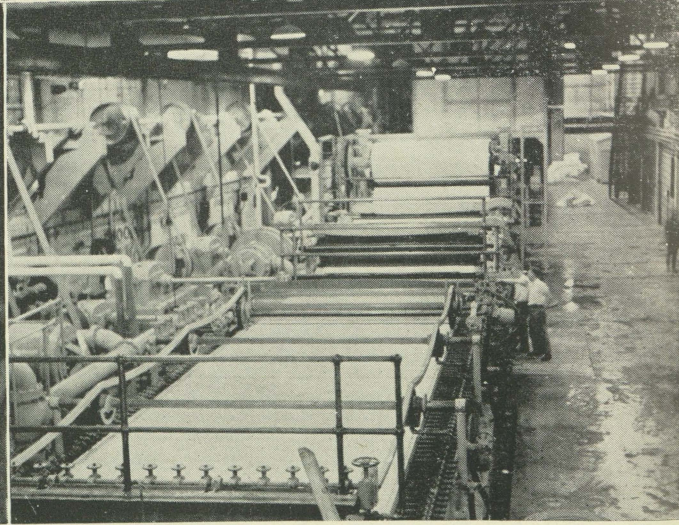
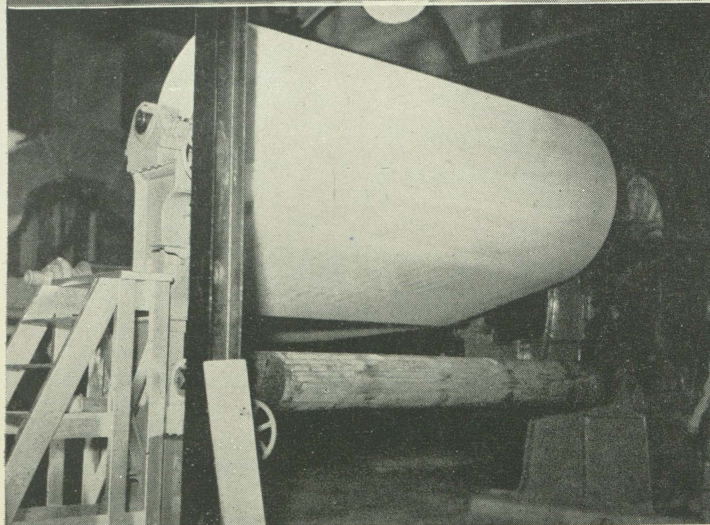
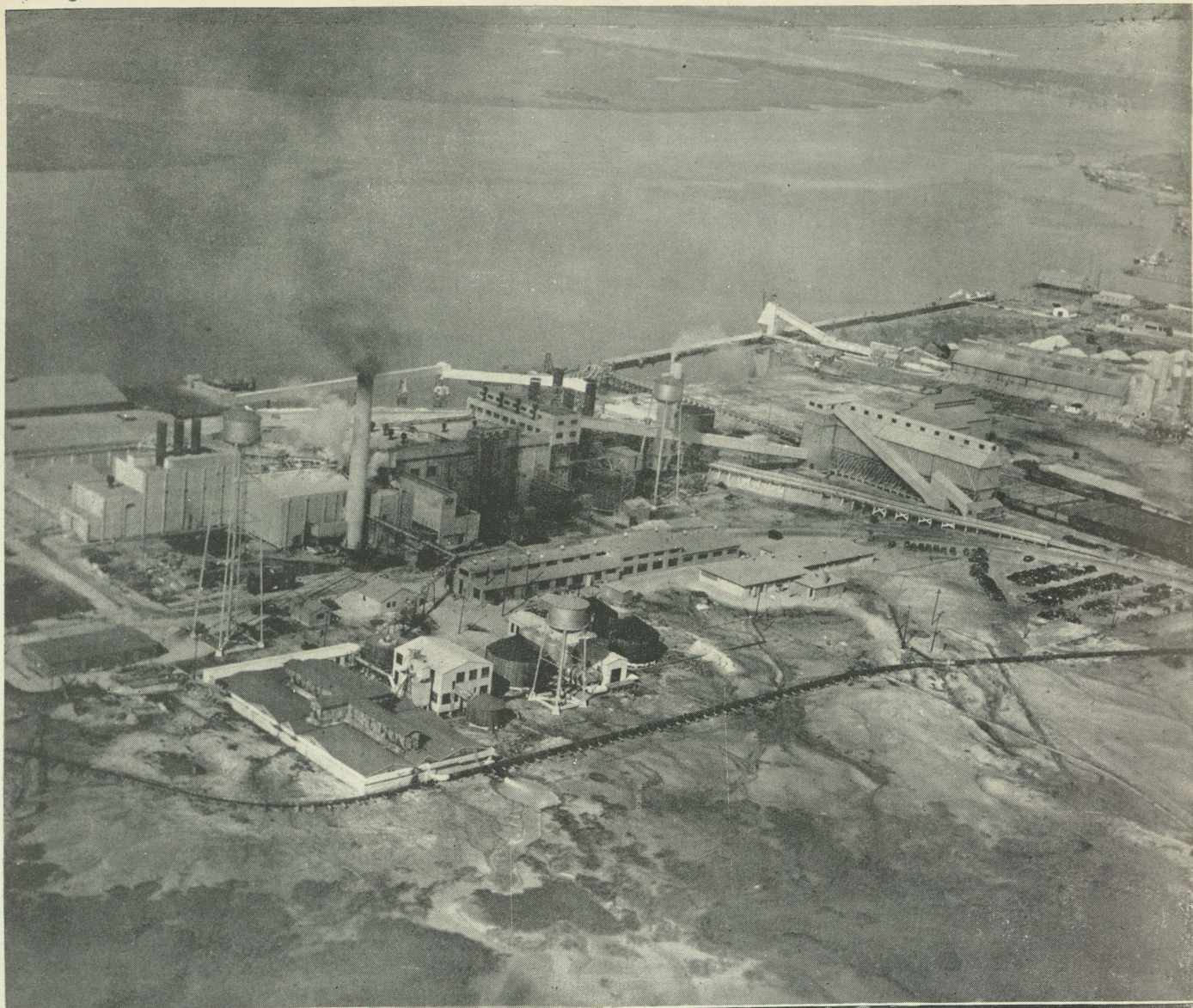
Southern Industries Inc., making paper, coat hangers, boxes and brooms, is ready to expand plant and equipment and expects to increase employment by 75 to 250. Hanger and broom production has been curtailed during the war and the demand has piled up.

Boat building and repair has been a major industry here ever since there has been a Jacksonville. For all its age, the boat industry of Jacksonville is, however, youthful and vigorous in its outlook. In Jacksonville were built many of the freighters and many of the warships that helped to win World War I and are now helping to win World War II. Shipyards and allied industries in the city

A view of the plant of the St. Joe Paper Company at Port St. Joe, on the Gulf Coast, which opened up another section of Florida to prosperity via the piney woods. This plant is a subsidiary of the duPont interests, manufactures kraft paper. Port St. Joe is a Phoenix-like city which arose from the ashes of another St. Joseph, one of the leading towns of Florida in the early 1800s and the site of the first constitutional convention where the State's first primary law was laid down in 1838. Because of the paper mill and other industries the community is now resuming its importance among Florida cities.







Above is an airplane view of the Rayonier, Inc., plant at Fernandina, responsible for the rehabilitation of another Florida community which thrived in the earlier days but which, for the lack of industries, was rapidly reverting to a fishing village. Near Fernandina are the ruins of old Fort Clinch, now a State Park, which commanded the entrance to the harbor on St. Mary's River during the War of 1812. Fernandina was the most important city and port of the Republic of Florida at that time. Florida's paper mill investment is more than \$30,000,000 and the annual payroll of Florida paper mills runs to nearly \$5,000,000, aside from the income to producers of pulpwood. Below are shown two inside views of machinery in the Rayonier plant.



are veterans at reconversion. They reconverted after the first World War and they are ready to convert after this one.

Gibbs Gas Engine Co., producing tugs, ships, and other vessels, has maintained throughout the years a fresh outlook, always open to new developments and opportunities. In the midst of war orders the firm has continued experiments with improvements in sports craft and with other products it is prepared to turn to when hostilities cease.

St. Johns River Shipbuilding Co., has turned out many vessels on war orders and is prepared to meet peacetime readjustments. Huckins Yacht Corporation, turning out war orders for a specially designed PT boat, has drafted plans for peacetime sports boats and cruisers; a new plant is nearing completion. Ship repair at loading berths is the post-war specialty of Merrill-Stevens which plans to acquire more floating derricks and to increase employment after the war to more than 1,000 over the 1939 figure.

Typical of the newer Florida industries is the 6-months-old Elkor Company. Handicapped because it is not an essential industry this plant has trained women workers to upholster furniture and with the end of the war it expects to expand with the addition of a framing plant to give employment to many veterans.

First in the Southeast to get into the glass manufacturing business, Florida Glass Manufacturing Co., has behind it now 16 years of experience. Products include glass containers for Florida food products, using Florida sand, soda ash, and dolomite and providing for food producers and food processors new opportunities. The firm is now operating short-handed but anticipates a 30 percent increase in production and a 25 percent increase in employment at war's end.

Miller Electrical Co., before the war did an electrical contracting business; during the war, large scale electrical installations in shipyards and war plants and production of ammunition containers; after the war, it expects to con-

struct, and install electrical appliances and apparatus, including a heater that the firm has developed. The company is now spending \$100,000 to retool and, as soon as Japan gives up, has plans to add 200 to the payrolls.

Typical of Jacksonville large pre-war industries is the huge cigar factory of John H. Swisher and Sons, Inc. Florida has long had its fine hand-made cigar industry but Swisher put the State into competition with the machine cigar industry of other areas. Before the war this plant employed 2,800 and turned out up to 2,900,000 cigars in a day on 327 machines operated on two shifts. Handicapped by war restrictions, Swisher is looking forward to post-war production on a scale that gives officials some doubt that they will be able to obtain all the labor they will need in Jacksonville.

These random but more or less typical examples illustrate the plans and programs of Jacksonville industry which cause businessmen to face the post-war prospect with calm confidence. They point to an increase in bank deposits from less than \$120,000,000 in 1939 to more than \$350,000,000 today as evidence of the pent-up buying power of the city.

## Miami

**D**URING THE period 1933-1939 manufacturing wage earners in Dade, Broward and Palm Beach Counties increased 100%. This rate of growth in numbers of persons employed was more than three times that for the State as a whole and, with the single exception of Mississippi, was nearly three times that for any Southern State. During the same period, the Southeast as a whole showed a rate of growth in such employment in excess of that for the Nation as a whole.

By the end of the 5-year period following victory there should be at least 28,000 employed in manufacturing in the area. This is an increase over such employment in the pre-war period of nearly 200%.

During the period 1933-1939, the population of the area more than doubled and the averaging buying

power per capita very materially increased. Therefore, the potential market for the sale of manufactured goods in the area much better than doubled. Manufacturing employment failed to keep pace with the local market. While some of this lag was due, no doubt, to improved efficiencies and increased output per man, the major cause was probably a deficiency in manufacturing capacity. Practically all products manufactured in the area, both in 1933 and in 1939, were consumed or used in the local market. This market will expand materially in the post-war period. The estimated rate of population growth in the area from 1935 through 1941 averaged a fraction less than 13% per year each year for that period. Due to the impact of the war, including necessary restrictions on civilian travel and construction, this trend was changed beginning April 1941. The increase to April 1942 was only 5.5%, to April 1943 was only 0.9% and to April 1944 was 6.3%. In 1944 the population was approximately 500,000. Had the trend in rate of growth not been changed as it was by the war, the population by April 1944 would have been over 630,000. The population growth was not stimulated by the war. It was retarded. This "deficit" in population by May 1944 was nearly 140,000 persons.

The area has a pent-up demand for population growth, which may assert itself in the immediate post-war period in the form of a higher rate of growth than obtained in the immediate pre-war period. It is most reasonable to expect, first, a slight decrease in population during a very short readjustment period then followed by a rate of growth equal to or greater than that which obtained in the pre-war years. We estimate that by the year V-5 the population of the area will be not less than 870,000. Larger local markets increase the number of types of products that can be profitably manufactured locally to supply that market. Therefore, the potential of local manufacturing employment to serve local markets increases more rapidly than the size of such markets.

A proved most important in-



redient in measuring the potential local manufacturing expansion is that increasing volume in various items manufactured will justify prompt increased investments for improved production processes, with resulting lower unit cost of production and progressively improved competitive position and extended sales area outside of the confines of the local markets. In general, it can be observed that factories to manufacture goods for strictly local markets start as craft shops. Increasing volume justifies gradual or rapid conversion to mass production methods. One complete mass production line is just as efficient, if not more efficient than a duplication of production lines in the same factory.

A third and most important influence on the profitable development of manufacturing in the area is that of air express and freight of domestic made articles into the vast and growing markets of the West Indies, South America, and even South Africa. For domestic made goods the point of export is the point of sale. Factories located at the point of sale have a distinct competitive advantage over those located remote from the point of sale. The Miami area is the natural aerial gateway to this vast export market. This fact has been definitely confirmed by the army and navy. In fact, when goods are transported by air, even to the eastern theatre of war, by the most favored island hop route beginning at Panama, Miami, in flying miles, is closer to that Pacific area than any other city in continental United States.

The burden of even the largest air transports is measured in tons and not in thousands of tons as are those of ocean surface ships. Therefore, air shipments can and will originate at natural aerial gateways without regard to the availability of thousands of tons of potential cargo, which consideration controls the point of origin of shipments in surface ships, regardless of the hundreds of extra miles of travel for such a ship that may be involved.

Again, air cargo potentials must be goods of high value dollar value

per pound, certainly of not less than 50c per pound. Such goods, in general, require high degree of skills in their manufacture. Efficiency of such skilled workmen, who earn and receive high wages, is extremely important. For such goods, the increment of salaries and wages may be as high or higher than 70% of the value of the goods. And that brings us to a most important asset of the area.

A fourth ingredient, which cannot be rated too highly but one which is most frequently greatly discounted or dismissed by a statement of generalities, is the area's inimitable climate and the favorable living and working conditions which it affords. The increasing unit cost of man hours makes any item which improves human efficiency most desirable. This is especially true for the manufacture of air cargo potentials or for any other products for which the value added by manufacture is a high percentage of the total value. For instance, if the item of salaries and wages is \$70 per \$100 value of product and if favorable living and working conditions improve the human efficiency 30%, which is quite possible, a factory to manufacture such a product would obtain a competitive advantage of \$21 per \$100 over any other manufacturer not enjoying such living and working conditions. Again human efficiency varies for individuals to even a greater extent than 30%. The opportunity to work and live in this area will make it possible for the manufacturer to attract the best and most skilled persons in his trade. This is a most important and very practical evaluation of our inimitable climate in industry. It is the same climate that people paid over \$200,000,000 a year to enjoy in the immediate pre-war period.

A fifth important ingredient is consideration of materials and supplies. A most favorable position would be held by manufacturers who could obtain most of their materials and supplies locally. But since raw materials and supplies can be shipped in more cheaply than finished products, the receiving of materials where necessary from points outside the

area or the State would not work against the expansion of manufacturing for the local market or for the export market. On the contrary, it should and will work in favor of the area as it did in Los Angeles.

It must be remembered too that for goods of high value added in manufacture the item of the cost of materials and supplies is of minor importance and for many products, because of the area's other advantages, may not hinder their manufacture line for sale in our own material markets.

A fifth important ingredient for the rapid and sound expansion of manufacturing is the availability of an abundant supply of dependable power. At any point in the area, large blocks of dependable power can be immediately supplied from the interconnected system of the private utility. This fact was most clearly demonstrated in the war. Every demand for power, regardless of the amount or location of the military or industrial establishment was so promptly met that the U. S. Navy conferred on the Florida Power & Light Company a citation for meritorious wartime service. While electric power is the life blood of manufacturing, it is a very minor item of cost. Purchased power for all manufactured products in the country cost only 82c per \$100 worth of such products. Therefore, while the cost of power may be somewhat higher here than in the industrial areas of the country, such extra cost is too minute to be important. The same can be said of fuel cost, an item of cost frequently said to "prohibit" extensive manufacturing development in this area. Like power, fuel is readily available in any required quantities. Power-wise, the area is fully ready for its inevitable large and profitable industrial expansion.

A sixth and a most critically important ingredient, in many ways even more important than any of the others, is Florida's present favorable political climate. Industry is on the move. Manufacturers have abandoned locations near to markets, near to raw materials and existing labor supplies



for locations less favorable in these regards because of unfavorable laws and trends in legislation toward more unfavorable laws. Florida's political climate is most favorable. If Florida wants the industrial development, which its economic advantages so richly merit and its economy so badly needs, then its political climate can and must be made just as attractive as is its world famous winters and, but little appreciated, summer climate.

If we add to these six ingredients, again referring to the local market, the enormous amount of manufactured goods used in building, the estimate of 28,000 persons employed in manufacturing alone in the year V + 5 seems very conservative.

## Tampa

**T**HE BATHING beauty is here to stay but if Tampa's post-war plans work out she'll be able to find a man with a good steady job in a growing local industry.

Smaller War Plants Corporation

officials, noting that the small businessman is not asleep at the switch, have expressed belief that small businesses may compete with the Sun queens in luring prosperity to the Tampa Bay area.

As an example of the planning that has been done to furnish a dependable foundation for continued prosperity, Tampa's six shipbuilding concerns have post-war plans for healthy expansion of plants, markets, and production.

Bushell-Lyon Iron Works, Inc., looks to designing and fabricating structural steel for building bridges and the like. Officials of the R. C. Huffman Construction Company hope to swing back to work on dry dock repair and construction of outside equipment including boats and barges.

Before the war, River Heights Boat Yard was building 28 and 38-foot pleasure boats and even while working on small boats for both the Army and Navy was ready for a speedy shift back.

Construction of steel vessels, all types to 200 feet in length, is the main post-war plan of Tampa

Marine Corporation. Tank and boiler work and ship repairing also will be done.

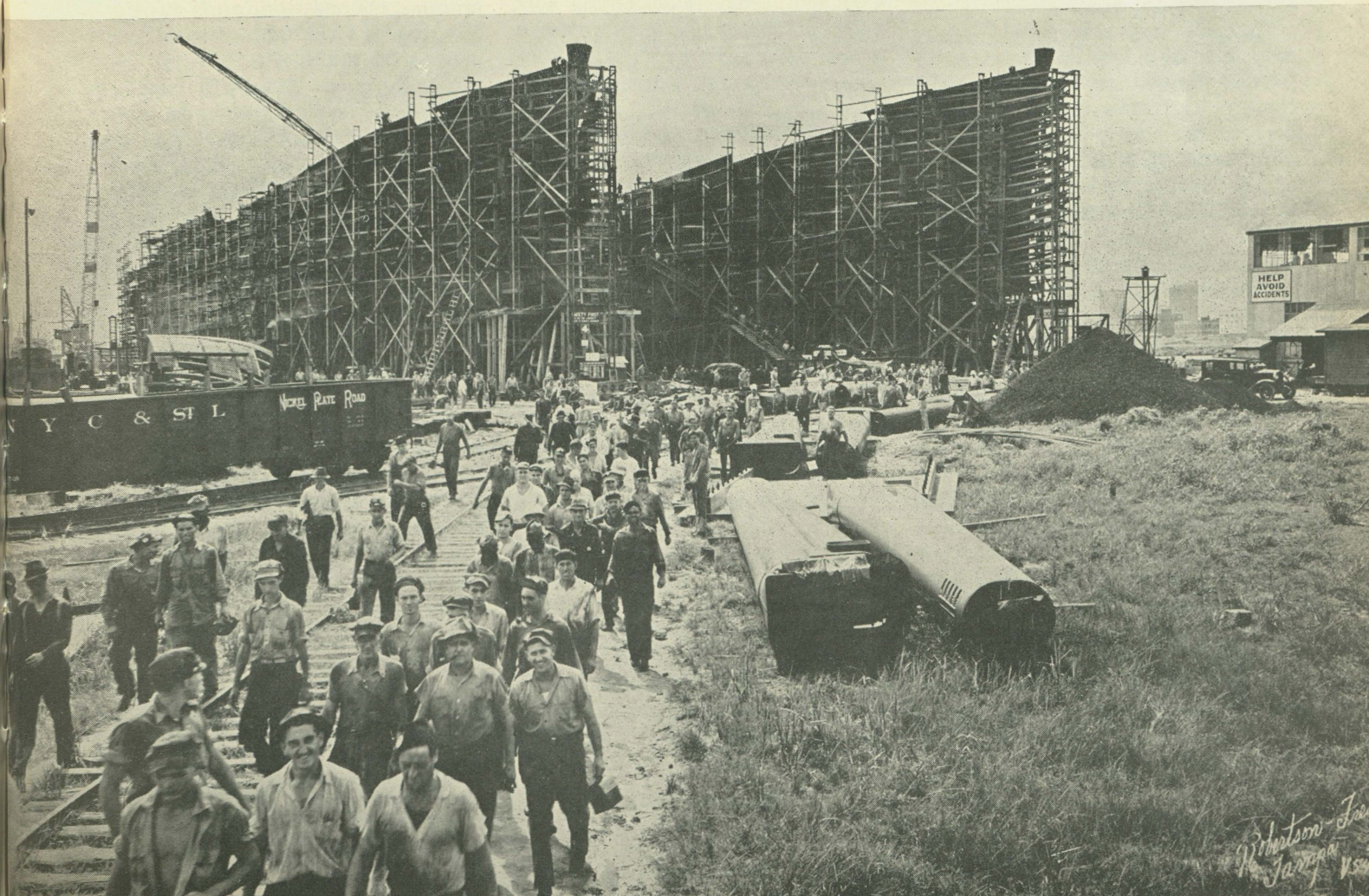
Tampa Shipbuilding Company and McCloskey and Company's Hooker Point Shipyard are Tampa's sole war industries coming under the heading of "big business." Tasco plans to continue shipbuilding, to go into production of pumps and has turned out a test model of the big auto freight trailer it is preparing to market after V-J Day.

M. H. McCloskey, Jr., believes the company he heads possesses a site with the "greatest possibilities for a repair yard of any place in the country. With the addition of two gates the dry docks there can accommodate 10 ships at a time for repair."

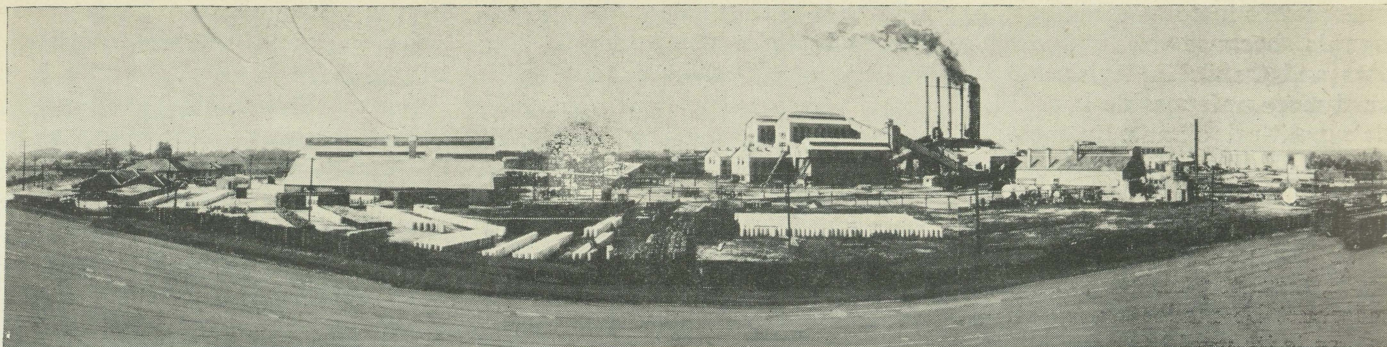
Pivotal point in Tampa's overall post-war planning has been the Hillsborough County Economic Development Committee, sponsored by the Tampa Chamber of Commerce and financed by public subscriptions and city and county appropriations.

Managing Director T. V. Standi-

A scene in the Tampa shipbuilding yards as workmen knock off for lunch. The two ships pictured in the rear have long since gone to war.







Aerial view of the manufacturing plant of Newport Industries, Inc., of Pensacola, where synthetic rubber is being produced. (See cover picture).

fer has listed 14 types of industries which the EDC has in mind for post-war Tampa. These include auto assembly plants, air conditioning manufacture, pleasure boat manufacture, glass plants, bottle, cork, tile and brick factories, large-scale meat packing plants, including poultry and cold storage facilities, cotton mills, manufacture of yeast and milk powder, broom handle and broom straw factories and additional citrus processing plants.

Negotiations already have been carried on for the location in Tampa of a tannery, grain elevator, union stockyard, glass factory, and a precision home-building factory making use of Florida lightwood stumps.

An EDC canvass of 171 Tampa manufacturers, exclusive of shipyards, showed that "it appears" there will be an increase of 16.1 percent in post-war employment over that of the present period and 31.7 percent over 1940 employment. Employment in 1940, considered a normally active pre-war year, was 7,600 but the manufacturers anticipate a total of 10,010 after the war.

A conservative policy was said to have been followed in approximating post-war employment in the plants surveyed and the EDC considers it likely the actual total will be greater.

The EDC also has made recommendations for poultry, vegetable, citrus, beef cattle, and dairying industries in the Tampa Bay area and has carried on a civic improvement program for Tampa, blue printing badly needed storm and sanitary sewer projects, a civic center of public buildings starting with a new Hillsborough County

courthouse, housing and slum clearance, streets and roads, harbor and airport expansion, and new schools.

The sanitary sewer project is designed to clean out the bay to attract more tourists, permitting a fishing pier and bathing beach at Tampa's doorstep. Yes, Tampa still has its eye on the bathing beauties.

## Pensacola

**T**HE SUBTROPICAL port paradise of Pensacola, discovered around 1528 by Capitan Maldonado, commander of DeSoto's powerful fleet, and christened Puerta d'anchusi, today is beckoning with a romantic yet challenging finger to business men, small and large.

Pensacola's population — 31,000 before the war and now more than double that—will in all probability remain well above the 50,000-mark long after the war has ended with the consequent result that more and more small businesses and industries are needed.

This is not the wishful thinking of Pensacola patriots. It is based on facts and figures gathered during a careful survey of the city and its present industrial trend.

Pensacola today offers splendid opportunities for the following types of businesses which could be small at first but which could expand beyond the wildest dreams of the men and women who accept the challenge.

Furniture manufacturers — The famous Weis-Fricker mill, which imports mahogany from the tropics, cuts it and prepares it for the Northern markets, has huge sup-

plies of mahogany which could be made into fine furniture. Other types of wood—rosewood and cypress — also are imported and available to smaller dealers. Hardwood and soft pine, of course, are readily available.

Novelty and souvenir manufacturers—There are literally hundreds of small articles that may be produced from mahogany and rosewood "ends." For example, ash trays, children's furniture, nameplates, book ends, toys, pipe holders, umbrella racks, tie racks, smoking stands, venetian blinds, tables, etc. Weis-Fricker gallantly endorse any proposals that manufacturers of small items like these locate near their factory and promise cooperation and support. Toy boats, airplanes, etc., will be much in demand.

Small boat manufacturers—Right now, Weis-Fricker is going nearly 100 percent into wartime boat construction. In normal times, such firms as Chris-Craft use their product extensively. Huckins Yacht Corporation in Jacksonville is quite a customer of Weis-Fricker. C. A. Weis, president of Weis-Fricker suggests that after the war Weis-Fricker could accommodate builders of small fine boats, including cabin cruisers, rowboats, sailboats, and such. The fast-drying glues required in such construction also are available right in Pensacola through Newport Industries.

Says C. A. Weis: "There are many opportunities right here in Pensacola for the man who would like to set up a small shop and make novelties and souvenirs from cur mahogany 'ends.' We have vast quantities of these ends, much of which we ship to Mobile and



to far distant places. There is no reason why such products couldn't be built right here and I believe the local demand would keep such a small manufacturer entirely busy until his business expanded to such a degree that he could start shipping. We'd be glad to lend our cooperation to the builder of fine small boats who might like to locate near our factory and possibly he might benefit from our experience and knowledge in the wood industry."

Weis-Fricker started about 1923 with a couple of small buildings and a handful of workers. The company cut cypress and pine first, went into mahogany and rosewood. Now employs about 150 at Pensacola, between 5,000 and 6,000 in mechanized crews in the jungles of the British Honduras, Nicaragua, and Mexico. Mr. Weis is optimistic about post-war possibilities in the mahogany and rosewood fields and foresees even greater expansion of his plant in the years ahead.

Varnish manufacturers—This is one of many, many industries which could take advantage of the raw product field which Newport Industries has to offer. Newport, headed by John H. McCormack, has developed more than 80 products from the distillation of pine stumps in Florida and now processes more than 500 tons of pine stumps daily. Newport is not at all jealous of its industry. Instead it shows great preoccupation with research and the development of the many products that can be created from turpentine, pine oil, and resin, the company's original reasons for establishing. Newport will cooperate with anyone who wishes to locate industries in Pensacola that will utilize its many and varied products.

Soap manufacturers—There is no sizable manufacturer of soap in the South right now. Mr. McCormack sees no reason why a manufacturer of soap could not operate profitably right in Pensacola with the raw materials from Newport at his finger tips. Mr. McCormack figures that such a manufacturer, starting in a small way, would find a ready, wide market for his product right in

the South and could slowly but gradually expand his field of operations. Tallow and linseed are being imported now in great quantities from South America; caustic soda is a raw material of the South.

Textiles—Mr. McCormack believes that a textile manufacturer could do well in Pensacola. Current research on ramie is progressing and this "fine fibre" will no doubt play a vitally important role in the manufacture of textiles in days to come. Possibly a textile plant in Pensacola would need to be air-conditioned because of climatic variations that affect textiles but this will be no problem after the war. Again, the proximity of raw products—cotton, ramie and other fibres, with the close availability of South American fibres—would be advantageous. Pensacola's unlimited 99.97 percent pure, soft water would be another great local advantage to textile manufacturers.

Economical operation—Such industries as those suggested by Mr. McCormack could be operated far more economically in Pensacola than in the North. The coal bill for a currently operating Pensacola industry, if operating in the North, would run well over \$50,000 a year higher than at present. The cost of building a plant—which would have to be weather-stripped and basemented and constructed for cold weather conditions—would be far in excess of the buildings required in Pensacola. Fire prevention regulations are less severe than in the North. The climate is all-year-round favorable for workers and, in normal times, there is a plentiful supply of local white native labor. These workers are quick to learn industrial skills and are cooperative in their attitude. Power is plentiful, comparing favorably in cost with that of any other section of the country.

Shoe manufacturing—There is no reason, says Mr. McCormack, why a man must go to Lynn, Mass., to successfully manufacture shoes. An air-conditioned plant, located in Pensacola—close to South America and the hides and with Newport furnishing chemicals used

in tanning—could start out in a small way and would undoubtedly find an ample market right in the South to begin with and could probably undersell competitors shipping here from the North.

Fertilizer—Frank Wells, of Saunders Fishing Co., one of the largest producers of red snapper in the world, says that from the waste material brought in by the fishing fleets operating off Yucatan, fertilizer could be, and has been, produced. His company is not doing so now because of scarcity of labor but Mr. Wells thinks that after the war he might start a fertilizer plant going.

Fishing nets—Thousands of dollars worth of fishing nets are used annually by the red snapper fleets. Some are manufactured on the East Coast, most of them in the North. Mr. Wells admits that there is an open field for the fishing net industry in Pensacola.

Cannery—Again, Mr. Wells says that when the time is ripe for the canning of fish, he'll do it. But there should be opportunities for more than one cannery in Pensacola. Saunders Fishing Company has made arrangements with a national concern for deep-freezing fish products after the war. Wells also contemplates the canning of fish in the form of "deviled fish" for sandwiches and "fish hot dogs." Mr. Wells also is doing research on the use of new kinds of fish for the table, including barracuda. Has also experimented with sharks for liver extracts and admits there is a field there too.

Paint manufacturing—Of this, Mr. McCormack, of Newport Industries, comments: "Heaven knows there is no place in the country that needs paint as badly as the South—yet all the paint is manufactured in the North." He pointed out that the synthetics and the resins are produced right in Pensacola and that the small manufacturer of good paints would find a ready market right in and around Pensacola, a market that could be gradually enlarged.

Paper manufacture—In this field, too, plentiful raw materials are readily available in Pensacola. Unlimited quantities of pine wood

(Continued on page 32)



# Industrial Research . . .

By RALPH A. MORGEN

Assistant Director, Engineering  
and Industrial Experiment Station  
University of Florida

**T**HE NEED FOR research by all industrial concerns regardless of size has been so well stated by such outstanding industrialists as Dr. Robert E. Wilson, president of the Standard Oil Company of Indiana, Dr. Charles F. Kettering, vice president of General Motors Company, and the late Thomas Midgley, vice president of the Ethyl Gas Corporation, that it seems unnecessary to repeat any of these arguments on which all farseeing business executives agree. The purpose of this article is to point out one method by which this desirable goal of research for all industries can be accomplished for the industries of Florida.

The Florida Engineering and Industrial Experiment Station was established as a division of the College of Engineering of the University of Florida by an act of the Florida legislature and approved by Governor Holland in 1941. This was before Pearl Harbor and at the time when the effect of the war on State finances could not be predicted. At the governor's discretion no money was released for the infant experiment station at that time.

However, soon after Pearl Harbor, when it became evident that the Federal government was going to need every facility and every trained scientist and engineer that it could get in order to fight a successful war, the Florida Engineering and Industrial Experiment Station was in a position to negotiate contracts for war research. This was made possible through Section V of the law which states as follows: "The State Board of Control is hereby empowered to fix and collect fees from materials, tests, and research work carried on in cooperation with State, county, municipal, and private agencies." Contracts therefore were entered into with several govern-



Home of Florida Engineering and Industrial Experiment Station, University of Florida, Gainesville.

mental agencies to carry on research. The nature of these contracts varied all the way from restricted through confidential to the top category of secret. Most of the results are still in the secret category and cannot yet be revealed. It is believed, however, by those who have worked on the projects that at least some of the results have post-war possibilities for industries in the State. How the industries can profit by these results is suggested below.

Through the courtesy of Major General H. C. Ingles, Chief Signal Officer of the Army Service Forces, the general nature of the results obtained on one of these research projects can now be revealed. So there will be no question of security involved the letter of General Ingles of April 4, 1945 to Dr. Tigert, president of the University of Florida, will be quoted exactly as he sent it:

"The University of Florida has recently completed several contracts held with the Signal Corps Ground Signal Agency, Fort Monmouth, N. J. Under these contracts the university has developed and constructed equipment for static

direction finding. It has trained military personnel in its operation and maintenance. It has provided facilities and equipment for putting into operation the first static direction finding (sferics) network in use by the United States Army. These contributions have been the foundation of the establishment of a working system of static direction finding which is now in tactical use by the armed services.

"Requests of theaters of war for sferics equipment have indicated the importance of this project. Although equipped only with facilities intended for research and development, the University of Florida met the demand for required equipment until regular production could be arranged. The cooperation and industry of the university enabled fulfillment of the requests from the theaters of war with a minimum of delay.

"The effort put forth by the University of Florida in sferics work cannot be measured on a 'dollars and cents' basis. However, it has supported a spirit of maximum cooperation between the Signal Corps Ground Signal Agency and



above the ordinary contract execution, that has resulted in getting equipment into the field immediately.

"I welcome this opportunity to thank the University of Florida and its personnel for their contribution to this project. Through the efforts of the members of the War Research Laboratory Engineering and Experiment Station, the development of static direction finding has been substantially accelerated."

In order to properly understand the developments that the Engineering and Industrial Experiment Station was able to make it is necessary to bring up some ancient history, and in the fields of static direction finding equipment, 1935 is indeed ancient history. This was 6 years before the legislature established the Engineering and Industrial Experiment Station. But the College of Engineering had on its staff men who were sincerely interested in conducting research, not for the monetary gain, but for information that could be obtained through research. Several members of the staff believed that tropical storms developed a characteristic form of static and that if proper means were provided to tune in on the wave lengths of the static of that particular storm, some information might be obtained about the storm. It was fur-

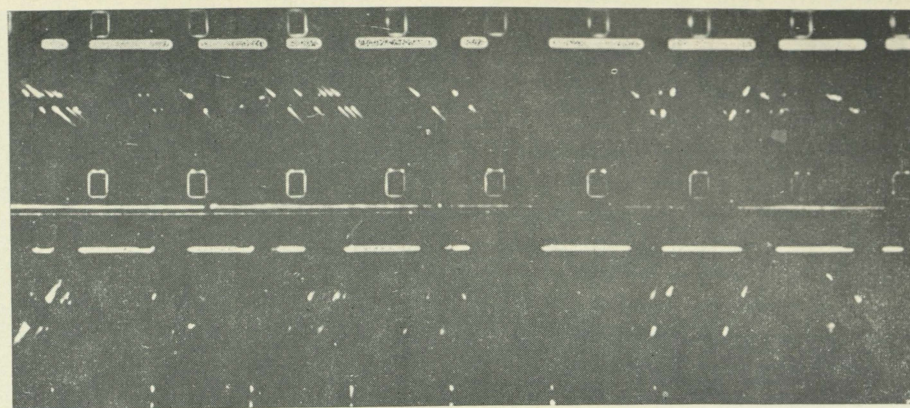


Fig. 4—Simultaneous static record of tropical storm made at Gainesville (upper) and Puerto Rico (lower).

ther hoped that if several stations were strategically located and all tuned in on the storm at the same time the position of the storm might be chartered by familiar triangulation methods. There were

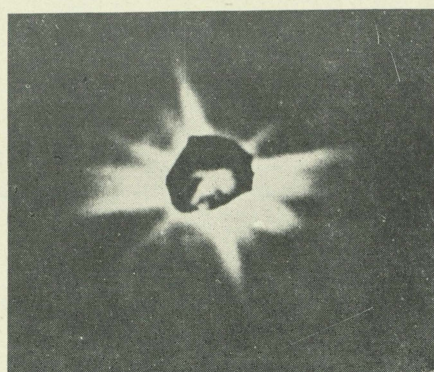


Fig. 3—Composite picture of Static on oscillograph.

no funds available for building equipment, but through the ingenuity of these men and help from the WPA, work was started on the locating of tropical storms by means of associated static.

During 1936 and 1937 two bulletins were published by the University of Florida on this subject of static emanating from tropical storms. Figure 2 shows the recording equipment with the oscillograph screen in the center of the piece of equipment at the left-hand side of the picture. Figure 3 is a 30-second composite pattern traced by the storm on the oscillograph. The direction of the rays gives an indication of the location of the storm center.

It was soon found that much more information could be obtained by several stations simultaneously recording the direction and intensity of the same storm. Through the aid of the Navy and the use of WPA funds, stations were set up at Miami and Puerto Rico. Pictures of the static flashes were taken simultaneously at the several stations on a moving strip of motion-picture film. The direction of the static flashes was found to be different at the different stations (see Figure 4), and thus the location of the storm could be triangulated. In the figure the horizontal dots and dashes occur on the strip in order to synchronize the two strips exactly one under the other. The slanting lines are those caused by the static emanations.

Without being able to bring this work to a successful conclusion the

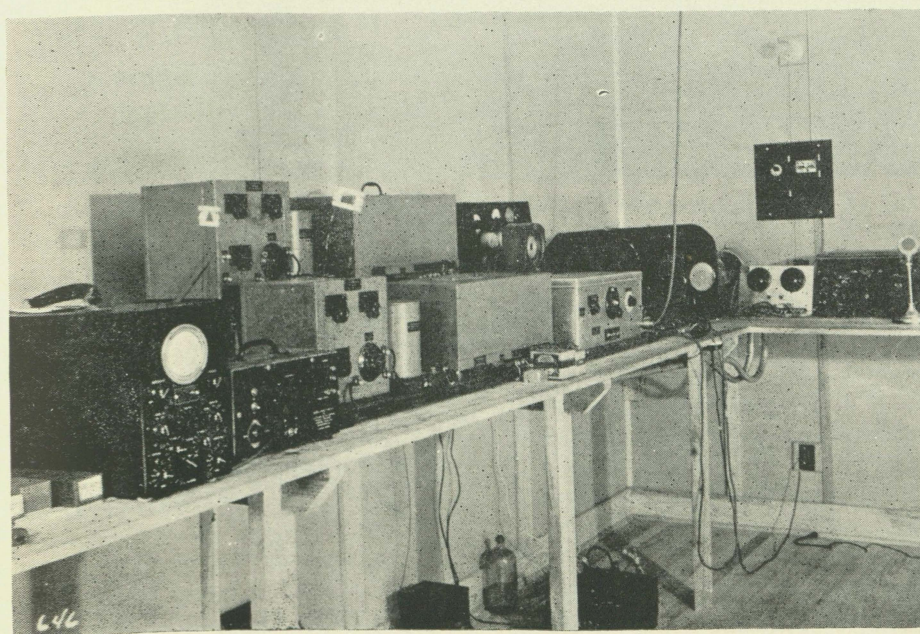


Fig. 2—Recording equipment showing oscillograph on left



funds ran out and the research was stopped. Before any other research funds became available the war intervened. A certain wartime application (the exact nature of which must still remain a secret) indicated that the development of the principle of static finding equipment was of major importance. After careful investigation, the Signal Corps of the United States Army came to the conclusion that the University of Florida was the only place in the United States where that type of information was available. As a result contracts were signed and very definite improvements were made in this field by the Florida research workers. The results obtained over those reported in the early bulletins are startling, and now indicate that this principle may have industrial applications as well as usefulness in locating tropical storms.

An important research lesson is learned from this little story on static finding equipment. Patient years of research with no thought of practical application had to precede the possibility of any use of the research. Certainly the original workers on this tropical storm project did not conceive that their research might be the means of helping in our fight against the Japanese aggressors. Yet the fact that these workers during peace learned some basic principles, later led to a very important war application. It is just as logical to assume that when this war is over these principles can be put to the use of peacetime industry.

With the war contracts well underway and the available manpower at a low ebb, money was released for industrial research at the Florida Engineering and Industrial Experiment Station in January 1944. Because of the manpower shortage and the preoccupation with problems of war financed by the Federal government, progress on industrial research was less than might have been expected under normal conditions. However, as fast as men could be found they were put to work on the various industrial problems of the State. In selecting the problems on which to work

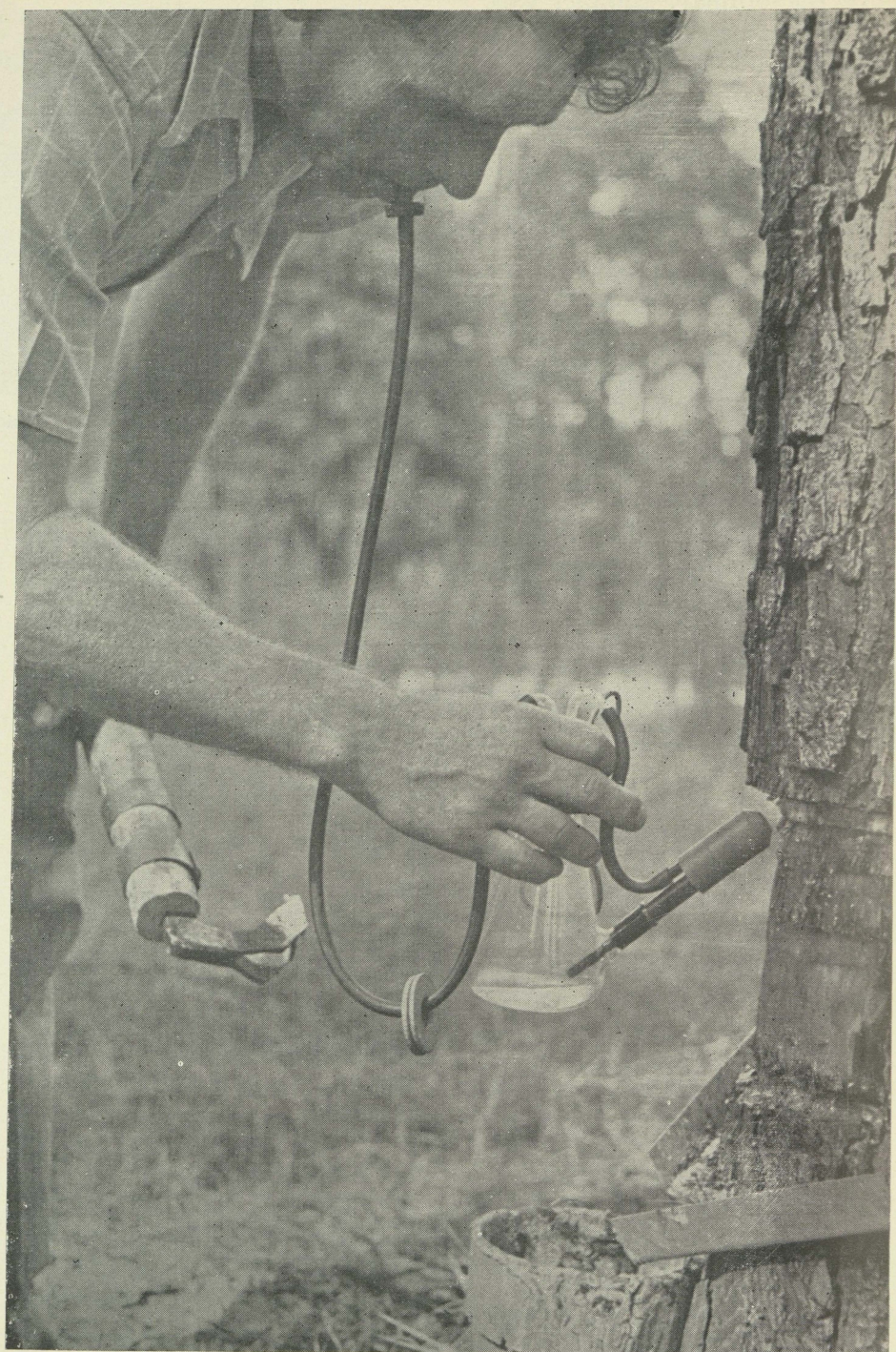


Fig. 5—Florida spray gun being used on pine tree to stimulate flow of gum.

two criteria were involved:

1. Will information on this subject help an existing industry in the State, or
2. Will information on this project develop possibilities for a new industry in the State?

At this time most of the projects covering industrial experiments in Florida have not run for a long enough time to give positive results. Most research is a slow, tedious, back-breaking procedure. It is

generally conceded that if one research project out of ten produces positive results in a reasonable length of time then the one successful project justifies the nine which produced negative results. With these facts in mind the industrial projects have been highly diversified.

The station has been fortunate in getting positive results on one project that is of material help to the naval stores industry.



In obtaining the oleo-resin from the pine trees the cost of labor is a very large portion of the total cost of the resin to the producer. The Southern Forest Experiment Station of the USDA showed several years ago that the application of small amounts of sulphuric acid when sprayed on the fresh cut increases the flow of oleo-resin by about 50% from each tree. For the process to be successful, however, it is necessary that a piece of equipment be supplied which will spray just the right amount of acid on the proper spot on the trees. The Florida Engineering and Industrial Experiment Station developed such a piece of equipment (see Figure 5) and this equipment is now in production, being manufactured by a Florida concern.

While this development was one of the minor research projects of the station, its application can be of immense value to the naval stores industry. If a sufficient number of these guns can be manufactured and put in the field the production of naval stores, which is particularly tight in the war effort, can be appreciably increased. In the post-war world when the price of naval stores will undoubtedly drop considerably from the present high values, the use of this gun and the sulphuric acid treatment will produce a net increase of gum from each tree. Therefore more gum from less labor will result in a lower cost of production.

From the above it can be seen that there are two general types of research projects on which the station can be of value. The first type is that involving the development of entirely new kinds of equipment and processes, and positive results can only be expected from a few out of many projects attempted. The second type of research is the development of a specific solution to a specific problem. In many cases a reasonable answer to this type of problem can be obtained in a short time, such as a year or less. This spray gun development is typical of that type of problem and the industries of the State must have many problems of that type which need solution. How many of these prob-

lems the station can solve will depend on how many of these problems the industries of the State will bring to the station.

In order to show the possibilities for the industries of the State a very brief description of several of the projects now in operation in the station for the benefit of the industries of Florida will be described.

Studies show that tannin occurs in commercial quantities in the bark of the common scrub oak of the State. The work to date indicates, however, that an industry could not stand on its own feet by just stripping the bark from the scrub oak and selling the bark for its tannin value. Some utilization of the wood must also be found. Wouldn't it be to the advantage of the paper and pulp industry of the State if it were found that the scrub oak could also be used for pulping purposes?

One of the major problems of Florida is the loss and inconvenience occasioned by mold growth on textiles, leather, and painted surfaces. The textile industry in the southern part of the State is growing very rapidly and rightly is specializing in sports clothes which are typical of Florida. Wouldn't it be a boon to that trade if some new mold-proofing process could be developed and help that industry enter the South American and Island trade where the mold problem is even more serious than it is in Florida?

The State has tremendous investments in bridges, structures, and pipe lines which are constantly deteriorating because of corrosion. While our summer rains make living in Florida comfortable during the summer, they aggravate the corrosion of steel and other metal structures. If some improved corrosion-proofing method could be developed, wouldn't that be a boon to the State as a whole and to every industry in the State?

Studies are being made of new uses and new formulations for limerock in buildings of all types. This work is the result of contributions by a farseeing industry for its own future security. Wouldn't this type of cooperation from other

industries be of value to those industries?

While Florida is still primarily an agricultural State the application of engineering research to the development of new equipment on the farm and of new methods of processing of foods through improved equipment and procedures is the function of the engineer. The Engineering and Industrial Experiment Station hopes that those interested in these industries will bring their engineering problems to it for possible solution.

These are just random samples of the type of work that the station is conducting while its major effort is concentrated on war problems. It is most interesting to contemplate that more research is being done by the Engineering College of the University of Florida than by all the other engineering colleges of the Southeast together. This fortunate happenstance is a direct result of know-how developed over the years at the University of Florida and the contributions of the Federal government made necessary by the war requirements. As a result of this combination of circumstances a highly trained group of research men has been gathered together by the Engineering and Industrial Experiment Station. This group can be retained to work on Florida's industrial problems after the war. The proven value of this successful team would be hard to duplicate once it is scattered. The State has made a start by contributing a certain amount of money for the operation of the Engineering and Industrial Experiment Station. Industry must supply the balance. Experience of the older engineering experiment stations in the northern part of the country shows that the success of those stations is in direct proportion to the support of the industries of those States. Where industry comes to those stations with its problems, where industry pays its share of the expenses along with the contributions of the State, there will be found both successful industry and a successful engineering experiment station.

As a result of the findings of

(Continued on page 32)



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# Florida Minerals . . .

**F**LORIDA RANKS FIRST and second, respectively, among the States of the Union in output of two products of the earth, even though not generally considered a mining State.

It stands first in the production of phosphate and second in production of Fuller's earth.

Of phosphate it mines 70 percent of the Nation's total and produced in 1941 a total of 3,367,797 long tons valued at \$10,239,778 at the mines. Phosphate rock containing at least 50 percent of "bone phosphate of lime" is an important agent for fertilizer. Phosphoric acid, derived from phosphate rock is used in the manufacture of sugar juices, jellies, and soft drinks, as well as in medicines and rust-proof metallic compounds. Chemical derivatives are valuable in production of baking powder, water softeners, and dental preparations.

Fuller's earth, found principally in Gadsden County, is used for clearing mineral, vegetable, and animal oils; also in the manufacture of hand soap, concrete, and asphalt preparations, paint and wallpaper. The mines near Quincy are the largest in the world while deposits are also found in Manatee, Marion, and Hernando Counties.

Other important mineral products of Florida are limestone, of which the State produced 5,266,148 short tons for a value of \$6,862,966 in 1941; hard marls and other excellent road-building rocks; high-grade clays which are shipped to Ohio, Pennsylvania, New York, Connecticut, and New Jersey for manufacture of porcelain and related products; brick clays, ball clay, fireclay, bentonite, feldspar, flints, quartz, and commercially valuable sands, the last being used in building, moulding, and polishing and in the manufacture of glass. In 1941 the production of sands totaled 1,613,346 short tons at a value of \$1,161,675.

Four metallic minerals are found in the beach sands of Florida extending from Duval County to Palm Beach County. They are ilmenite, zirconium, and monazite.

Before the war ilmenite, rutile, and zirconium were shipped in vast quantities from India and Australia. When the war stopped shipments, Uncle Sam became desperate for these vital minerals and Florida production was greatly enlarged. During the summer of 1944, 2,000 tons of ilmenite and 300 tons of rutile were mined and shipped each month from operations near Jacksonville, and this volume

was expected to be doubled in 1945.

Ilmenite is used in the place of lead in paint to produce a quality which will not turn gray on contact with sulphur water. It is used also in the manufacture of automobile tires and imitation ivory.

Rutile is used for coating welding rods, for producing smoke screens by the Army and Navy, and in the manufacture of artificial teeth. With ilmenite, it is a necessary ingredient in the manufacture of ferro-alloys for use in steel.

Zirconium is used in making porcelains, as a refractory in the steel and aluminum industries, and for the manufacture of gas mantles, spark plugs, electric fittings, paint, dye, rubber, textiles, and other commercial products. Monazite also is used in the manufacture of gas mantles.

Florida's mineral industry is alive to the value of research. Projects are being carried on for testing the properties of limerock for a variety of purposes; for the development of high grade ceramic products from Florida clays; and for removal of fluorine from phosphates suitable for food for human consumption. Wide fields especially are open in further development of glass and ceramic products. The State fails to satisfy its own needs in these to the extent of some \$11,200,000.—Manufacturer's Record.

# Florida Industry . . .

**F**LORIDA IS POISED on the threshold of a promising era of industrial expansion. Developments begun before the war have been amply justified by the war-time utilization of the State's many natural advantages. These are to be carried over into peacetime reconversion.

Blessed by nature with resources sufficient to multiply many times its pre-war industrial output, the State has gained from the war years, with their training programs, a vast influx of workers,

both skilled and unskilled, to translate latent peacetime possibilities into prosperous reality.

A miniature of the future is revealed in the promising picture of the past. By 1939 the value of Florida manufactures had attained a total of \$241,484,000. Military restrictions do not allow a later recapitulation, except in certain classifications. It does permit the information, however, that in 1939 the number of wage earners in Florida manufacturing plants was 52,732 and that by 1944 this num-

ber had increased to 117,800. As a further comparison, the Bureau of Labor Statistics reported the total of all nonagricultural workers in the State in 1941 to have been 365,000 with an increase to 485,000 in 1944.

Broadly classified, Florida's chief manufacturing enterprises cover four fields; agricultural and food products, forest products, tobacco manufacturers, and fish processing.

Because of its large citrus, vegetable, and livestock production food processing plants naturally rank highest in the State's economy. Canned citrus fruits and juices brought the State \$82,000,000 in 1943-44. The value of proc-



essed meat products was placed at \$10,000,000 and income from sugar cane products totaled \$8,000,000.

New developments in food processing, initiated by wartime demand, include three vegetable dehydration plants, at least one of which has perfected elaborate plans for expansion that contemplate also the processing of stock feed and fertilizer from sweet potatoes.

The growing importance of the sweet potato in industrial processing is further evidenced in a nearly-completed \$7,000,000 starch plant at Clewiston in which yams will be the raw material.

With 65 percent of Florida's land consisting of forests, it is not surprising that finished wood products stand high on the industrial list. The pulp industry alone accounted for income of \$41,000,000 in 1944 and led the entire Southeast in this respect. Lumber and kindred products amounted to \$25,000,000, including receipts from the manufacture of wooden containers for shipping fruits and vegetables. For the last 145,000,000 board feet of lumber is consumed annually.

An important byproduct income accrues to owners and processors of forestry through turpentine operations. About 250 turpentine stills turned out naval stores valued for the 1943-44 season at \$6,499,825.

Following forest products in relative importance, Florida's tobacco industry consists largely of cigar factories. These plants, the principal of which are located in Tampa, Key West, Jacksonville, and Quincy, turn out products annually that exceed \$26,000,000 in value.

The State's extensive fishing industry is the basis of many processing plants. These yielded total income of more than \$20,500,000 in 1944. They include dehydrating plants, quick-freeze plants, and oil-extraction plants. Byproducts are a substantial source of income in this industry. Among these are shark liver oil for Vitamin "A" products, sharkskin leather, shark steak and fillet, poultry and animal feeds, buttons and novelties from fish-scales and shells, and

tropical fish as pets, which alone had an estimated value in 1943 of \$4,650,000.

In 1943 commercial fishermen caught 336,892,679 pounds of fish valued at the docks at \$13,207,710. The 1930 catch was 120,415,000 pounds with a value of \$4,645,700. The State's fishermen own a fleet of some 8,000 boats, of which 13 are sailing vessels, 108 large motor boats and 8,149 smaller craft. This tabulation does not include several new steel shark boats which have been added to the fleet during 1945.

There are 246 wholesale establishments handling fresh and frozen fish products and employment is provided to around 11,000 persons by the commercial fishing industry.

The 12 sea food products which lead in commercial importance are mullet, shrimp, red snapper, Spanish mackerel, catfish, kingfish, grouper, trout, oysters, redfish, bluefish, and crappie. Florida supplies about 10 percent of the commercial fish produced in the United States.

Florida has the only commercial sponge fishery in the United States. Tarpon Springs' divers with a fleet of over 100 boats, harvested \$2,549,862 worth of sponges in 1944. Figures on the value of hooked sponges at Key West are not available for 1944 but the estimated value of their catch is placed at \$100,000. These figures are not included in the more than 13 million dollars dock value set for the fishing industry.

There are four shrimp centers in the State, Mayport, St. Augustine, Fernandina, and New Smyrna. The shrimp fleet includes 150 boats, which in 1943 recorded a haul of 12,000,000 pounds and the 1944 figure is expected to exceed even that record. Clam and oyster beds are also numerous.

Besides these major industries, promising prospects are visible in the fields of glassmaking, ceramics, machine shops, chemical and fertilizer manufacture, stone, clay, and concrete processing, copper, tin, and sheet metal works, which already contribute substantial, though less impressive, additions to the over-all industrial take.

The trend of national industry is southward and Florida is taking stock of its possibilities. It realizes that in addition to its own needs it furnishes the logical export points for shipments to South America. Wartime accomplishments have amplified the prospects. Expenditures for war-need expansion from July 1940 through June 1944 totaled \$645,000,000. While War and Navy Departmental installations accounted for 81 percent, important developments of a more permanent nature also resulted. Sixty million dollars was expended on plants and equipment for the production of ships, combat vehicles, and aircraft; \$43,000,000 on housing projects; and \$21,000,000 on chemical and food processing plants.

Florida has been recognized for doing a good job in the Nation's shipbuilding program as the "M" awards by the Maritime Commission can testify. Other plants, while having received less tangible recognition, have done equally as well. The end of the war will see the release of vast skilled executive and artisan ability for potential industrial expansion along peacetime lines.

Research, already far advanced, will contribute greatly to the anticipated advancement of the State's industries. To assist small plants to set up their own laboratories, the 1943 State legislature created a State-financed industrial and experiment station at the University of Florida. Its facilities, now devoted largely to war purposes, will become available for study by plants wishing to install their own experiment facilities.

Numerous private laboratories are already engaged in the processing of pectin, oil molasses, stock feeds, alcohol, and yeast from citrus byproducts; in dehydrating and quick-freezing vegetables; in deriving various chemical products from turpentine; in using sugar cane pulp in the production of paper and alpha cellulose; and in the manufacture of starch, yeast, alcohol, and stock feed from sweet potatoes.—Manufacturer's Record.

In a recent survey, 796 plants reported the use of 16,805 electronic devices.



# Florida Industrially Sound .

**E**CONOMIC STABILITY and progress in Florida are set forth in facts and figures compiled and distributed by B. J. Van Ingen & Co., Inc., Miami:

Since 1940, Florida has experienced a phenomenal growth in population. Thousands of individuals from other parts of the country have poured into this subtropical State. Many are only temporary residents, attracted by the shipbuilding and other war industries. Many are the members of families of servicemen stationed in Florida, who will return to the points of their origin at the end of the war. But by far the greater majority of these newcomers are here to stay and are the vanguard of thousands more to come.

It is a great mistake to compare Florida's rapid progress today with the boom of the 1920's. Conditions are not strictly comparable. To the pat phrase that "history repeats itself," let us suggest that history only repeats itself when conditions repeat themselves. The economic and financial conditions of Florida in 1945 are to those of 1925 as an adult is to an adolescent.

Florida's geographical, health, and climatic advantages have made it for many years the playground of nations. The State has also gained considerable fame as a producer of fine citrus fruits and winter vegetables. That cattle raising is an important source of revenue is also well known to students of Florida's economy. But the extent of and the reasons for the remarkable advance in the economic and financial condition of the State are not too widely known.

## CITRUS INDUSTRY . . .

Oranges and grapefruit, the backbone of Florida's agriculture, have been grown in Florida for centuries. It was not until the middle 1920's, however, that the industry approached any degree of stability.

Experiments conducted by private and State agencies have resulted in a decided improvement of both internal quality and ex-

terior appearance. Greatly increased production per acre and the extension of the shipping season have ensued from the intelligent application of the recommendations resulting from these experiments. Tests have shown a very definite trend toward higher solids and vitamin C content in both midseason and Valencia oranges.

Statistics for the 1926-27 crop season reveal that in that year there were shipped from the State, 9,090,000 boxes of oranges, 6,958,800 boxes of grapefruit and 540,000 boxes of tangerines a total of 16,588,800 boxes, with a value of \$42,887,340. Compare these figures with those of the 1943-44 season when the crop was 46,000,000 boxes of oranges, 31,000,000 boxes of grapefruit and 3,600,000 boxes of tangerines, a total of 80,600,000 boxes, with a value of \$137,330,000. This was the largest output in the history of the State and the first time that Florida exceeded California's production. Complete figures for the 1944-45 season are not yet available as this is written, but increased acreage planted to citrus and increased production per acre, indicate that, despite the loss suffered as a consequence of the October 1944 hurricane, the crop will be large. It is estimated that the value of the 1944-45 crop will be \$156,000,000.

Inherent in the increased production per acre and in the annual increase in the acreage of citrus groves has been the danger of overproduction. An actual or expected bumper crop had the effect of depressing prices and preventing an orderly marketing of the crop. The problem of converting the excess of supply over normal demand into a profit instead of a loss has challenged the ingenuity of the industry and its adherents. The solution of the problem of overproduction has not only had the effect of stabilizing prices for the fresh fruit, but has given birth to new and profitable industries in the State.

As recently as 1925 the canning of citrus fruit and juices was in the experimental stage. In that year an experimental cannery met with some success in canning grapefruit hearts. This plant, however, was primarily interested in the use of culls and not so much in the solution of the problem of utilizing the surplus fruit. It was not until 1932 that experimentation and research finally demonstrated the practicality of canning citrus fruit on a large scale. From that time on the canneries, concentrate plants, and processors of citrus byproducts have increased in number and have taken an increasingly greater percentage of each season's crop.

In the short span of 8 years the canning and concentrate industry has more than doubled its purchases of the fresh fruit. In the 1935-36 season only 31.7% of the grapefruit crop and 1.4% of the orange crop went into cans and other processed items. Of the 1943-44 crop 66% of the grapefruit and 23% of the orange crop was processed. In other words, Florida citrus went into 30,973,000 cases of juice and segments in the 1943-44 season. Members of the industry have intimated that although these figures are imposing, they are only indicative of greater purchases in the future.

In contrast to the two or three canneries operating in 1925, the 1943-44 Directory of Florida Manufacturers lists 66 companies engaged in canning orange and grapefruit juice and blends of the two. Thirty-three of these companies and one other also canned grapefruit segments, four manufactured citrus concentrates and three manufactured citrus bases, fillers, and marmalade pulp.

The byproducts of these plants are not only finding considerable markets but are reducing the cost of the main products. Oil from the peel, for example, is pressed out and split up into vitamin concentrates, orange perfume oil, and terpenes. The residue is used as a

(Continued on page 33)



# In Search Of Enterprise . . .

A PROMOTIONAL program has been launched by Florida Power and Light Company, which it hopes will be instrumental in stimulating development of the great but as yet largely latent industrial resources of the State. Its long-range objective is to provide jobs for 100,000 persons in new and expanded manufacturing plants in the first 5 years following the war.

The purpose of the program is to further improve the over-all economy of Florida by creating additional wealth within the State, through extensive, profitable local employment of Florida residents. This employment would be in manufacturing products for sale in the local, national, and international markets. The presence in Florida of bountiful supplies of many raw materials, which are not utilized to their fullest, is a factor incorporated into the promotional program of the company.

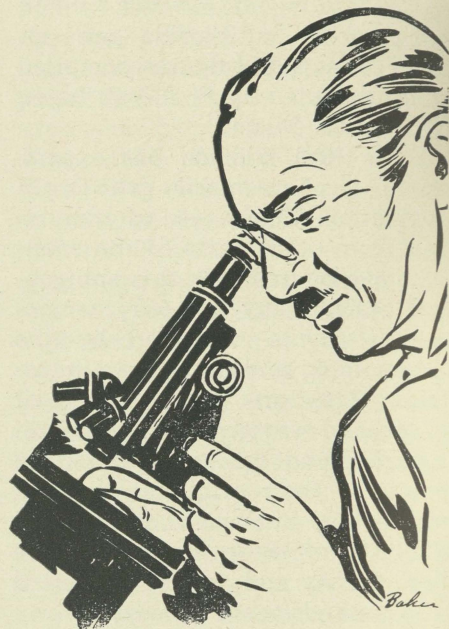
The objective of the program is constructively to assist communities served by the company to create in Florida the jobs for 100,000 persons in new and expanded

Power & Light Company has taken these steps:

It has launched an advertising program which is local, national, and international in scope. This program points to specific natural resources in the State and the potential advantages of locating manufacturing industries in Florida.

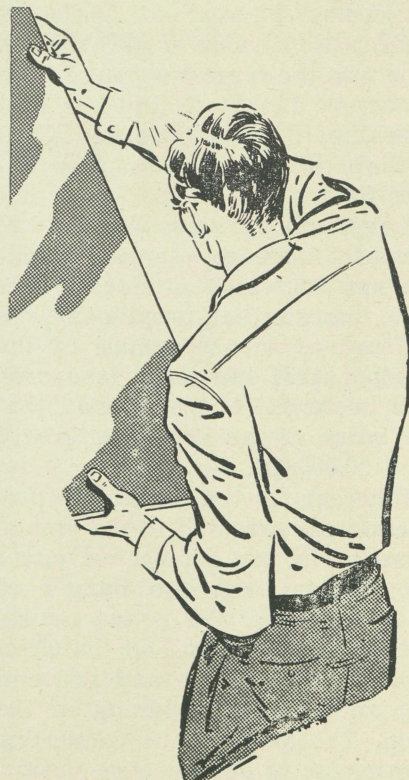
Industrial abstracts summarizing research material on which the advertisements were based, together with copies of the ads, are mailed each month to hundreds of persons in and out of Florida, who have expressed interest in the industrial development of the State. These abstracts deal with special natural resources and with specific industrial possibilities. Copies are available from Florida Power & Light Company district manager.

Studies of the economic back-



ground industrial opportunities in various communities.

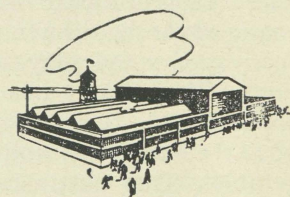
At the recent All-Florida Industrial Exposition held in Miami and attended by thousands of visitors from all over the State and the Nation, the company sponsored a booth which contained much of the material prepared by the company, along with a booklet showing



manufacturing plants. This would represent an increase of nearly 200 percent over the number of persons employed in manufacturing in all of Florida in 1939.

To develop this program, Florida

ground and future industrial and commercial potentialities of a number of Florida counties have been made by R. B. Roberts, Jr., Florida Power & Light Company sales manager, and these factual surveys are also available for those interested. They show anticipated development and point the way to

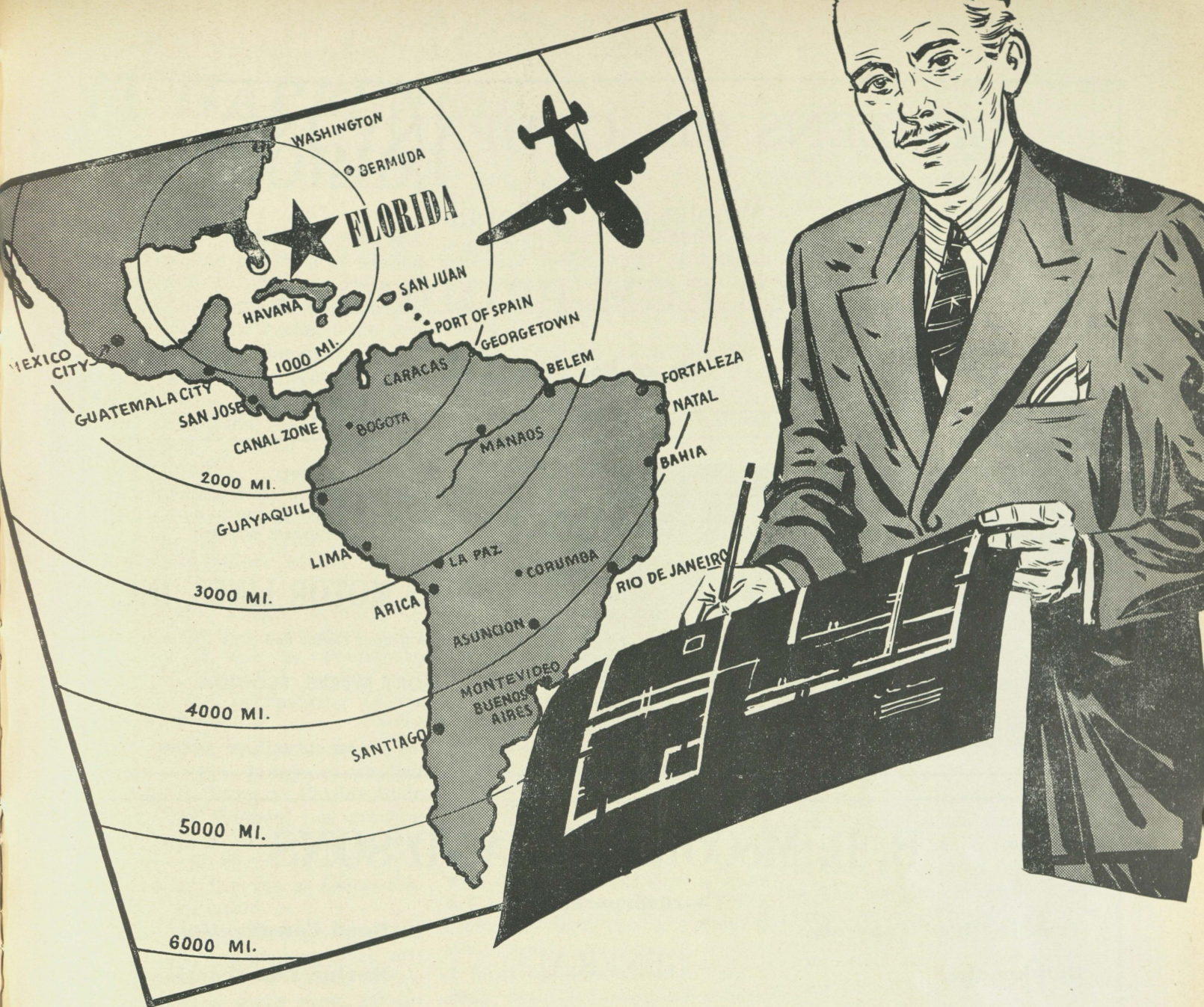


the company's own preparation to meet the power needs of Florida's Industrial Empire.

Through sponsorship of a weekly radio program, further attention is brought to bear upon Florida industry. Each week, the program salutes some Florida industry, describing its success and growth and the part it is playing in creating gainful employment in Florida.

In connection with such a program, it has been stated, "Our greatest need is not resources; it is not power; it is not labor; it is not capital; it is not markets; it is not even favorable freight rates. These all have their appropriate





places, but our greatest need is business enterprise."

Through the program, the company expects to assist in arousing the people of the State to Florida's industrial potentialities, fully expecting that they, in turn, will build their own plants or bring about the establishment of plants in their communities through their existing industrial organizations. Thus, greater prosperity will be brought to Florida communities and more jobs will be created in the post-war period.

As now constituted, the plan has enlisted the services of the Florida State Chamber of Commerce and other experts who conduct the necessary researches as to the availability of raw materials in the

State and the commercial possibilities of processing them. This information is then compiled in the form of abstracts by the company's industrial development department.

Typical of the campaign is the advertisement which is being used during July, entitled "Pine." This advertisement points out that lumber has long been a staple product in Florida and that for more than a century, the State's forests have been pouring forth golden treasure. At present, some 22,000,000 of the State's acres are suitable for forest land and virtually every county in the State has valuable forests.

It is shown in the advertisement that even after the timber has

been cut, vast potential wealth remains in what was once the waste in the preparation of lumber. From the sawdust, tops, branches, and culls come, literally, scores of valuable byproducts which when properly used, can form the basis of many new and important industries. Some of these byproducts are listed in the advertisement.

The importance and foresightedness of Florida's present lumber and naval stores industry is recognized, but the way is pointed for others to create new and flourishing industries by making use of byproducts. Such additional industries would, of course, provide new jobs.

Another abstract and advertise-

(Continued on page 44)



# CITIZENS OIL COMPANY INC.

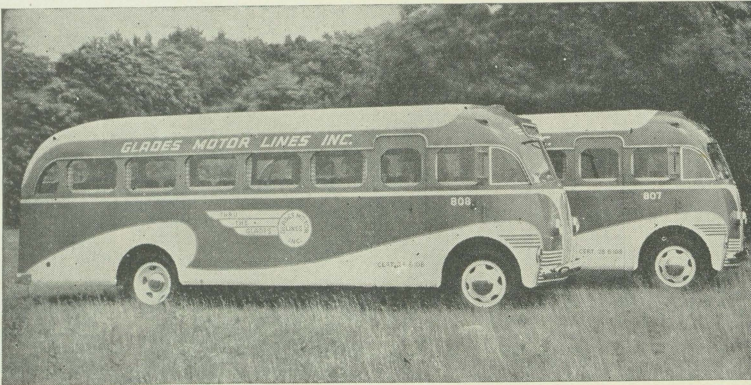
Wholesale and Retail

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# IT HAPPENED IN FLORIDA . . .

**B**ECAUSE THE BUS was late, a husband got tired of waiting for his wife to arrive and ran off with another woman. The wife has filed a claim in Jacksonville and wants to sue for damages.

★ In Tampa a motorist parked in front of the ration board office while he argued that he did not have enough gasoline—but left the motor running.

★ A test charge set off during rehearsals for presentation in Bradenton of "Here's Your Infantry" broke 18 windows in the school-house.

★ Associate Judge Richard G. Keys got off to a good start at his first day on the St. Petersburg municipal bench by paying a \$1 fine for the overparking of his own car.

★ Mrs. K. E. Gulick, assistant director of the Longmire student alumnae building at Florida State College for Women, has growing bean plants to prove that the baked pork and beans, offered to but spurned by the cat at Camp Flastocowo, sprouted.

★ Drowiness proced the downfall of a Miami ambulance driver, after the hold-up of a taxicab driver. He entered a girl's room for an uninvited nap and she called police when she was unable to arouse him and persuade him to leave.

★ Hit by a retaining rim when a milk truck tire blew out, a little St. Petersburg girl went to the hospital with injuries.

★ Twenty housewives who live in the Lake Avenue housing project at Tampa held an indignation over swarms of crickets which lately had been eating holes in clothing, consuming food, frightening children, and keeping everyone awake.

★ Returning from a year and a half overseas a Tampa soldier found his wife had had a baby this January, named both in suit for divorce, in order to clear up parental responsibility.

★ A totally deaf St. Petersburg

woman successfully defended herself in county court against an eviction suit brought by her landlady who was represented by counsel.

★ Cared for at the Hillsborough Humane Society is Brownie, a female mixed-breed dog who walks on her hind legs because she was born without forelegs.

★ A Tampan and his wife stayed home to avoid risk of accidents all day Fourth of July but on a cautious drive that night a full-grown horse crashed through the windshield of their car.

★ At Orlando a 12-year-old boy shot himself in the neck and chin while practicing quick draws with a pistol-grip shotgun in front of a mirror.

★ A Tampa boy found 42 boxes of 22-calibre cartridges in a vacant lot, turned them over to police without hesitation. A motorist stopped to give aid to a soldier stranded on a lonely 'Glades road with a flat and no spare and a wife and baby, lent him a spare tire and wheel . . . Both of which prove that there are exceptions to every rule.

★ Most unlikely place to find a stray mule is downtown Miami but that is precisely where one was found.

★ At Pensacola a youth escaped from jail, hid all night in a sewer drain beneath it, was captured the next morning.

★ At Orlando police arrested a drunk who could not pay his fine because \$180 had been stolen from him by another prisoner who on his arrest concealed the loot and gave it to a third prisoner who was discharged, taking the money with him. The money was recov-

## OUR COVER PICTURE

Pictured on our front cover is the isoprene plant of Newport Industries, Pensacola. This is the only plant in the United States producing a component of synthetic rubber from turpentine.

ered on the rearrest of the third prisoner.

★ Miami police took a revolver away from a 69-year-old resident who was so quick on the trigger that he emptied it, wounding his wife, when he heard noises at night.

★ The bride waited at the church in Jacksonville but as soon as the prospective bridegroom had helped put out a fire in his barbershop he rushed to the church in time to say "I do."

★ At St. Petersburg a motorist was arrested for leaving the scene of an accident in which he ran his car into and damaged a boat.

★ Arrested at Tampa as a navy deserter and on bad check charges an 18-year-old youth was found to have bought a \$1,000 war bond with part of his ill-gotten gains.

★ A Tampa gentleman, seated on a bus, offered to hold in his lap the grocery purchases of a standing young woman, but she forgot about them and left him holding the bag—full of lemons, carrots, and gingerale.

★ Officers are seeking in the vicinity of Pensacola a modern Robin Hood who has killed a number of cows with a bow and arrow.

★ The gadget children at Lakeland had been playing with was identified as a detonator for a 35-mm shell after it had exploded, blowing off the hand of a 6-year-old boy.

★ A woman circus performer sued, at Miami, a man of the flying trapeze for divorce, attacking the tradition that the show must go on when he interpreted it to mean that she should take part in their aerial act less than two weeks after the birth of each of their three children.

★ A Tampan successfully defended in court his right to an automobile which he said was given to him by a woman whom he married in an airplane as part of a circus publicity stunt.

★ St. Petersburg officers are seeking a man with buckshot holes in his pants as a gasoline thief fired upon by an irate resident.

★ A case was made out at Miami

(Continued on page 43)



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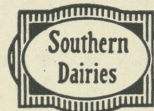
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# County Activities and Personalities...

**T**HE MARTIN COUNTY commission has insisted upon an audit of the financial records of Jensen Road and Bridge district before taking over the district's duties on July 1.

■ Duval County commissioners are receiving applications for franchises to collect garbage in the areas outside Jacksonville city limits. The Florida legislature, in recent session, gave authority to the commission to issue franchises for this service.

■ County Commissioner Henry Belcher of Pinellas County, has suggested to his colleagues that plane transportation between St. Petersburg and Tallahassee be furnished members of the Pinellas delegation attending the special session for reapportionment.

■ Opposition has arisen to the proposal that the city of Miami buy 640 acres on the Tamiami canal 11 miles west of the city as a site for a landing field for private airplanes. The attorney representing "Private interests that want to build such an airport" argued that the question was "whether the taxpayers should be saddled with the burden of providing private airports, or whether this should be left to private capital."

■ Volusia County has decided that the sheriff and his deputies shall drive their own cars in performance of their duties. Sheriff Alex Littlefield submitted a bid of \$4,550 for the purchase of six cars now owned by the county.

■ Members of the St. Lucie County commission and their attorney, D. C. Smith, went to Washington to attend the hearing on the Fort Pierce inlet district's appeal on the adverse decision on its application for reimbursement of funds expended on the inlet project prior to the time it was taken over by the government.

■ The construction for exterior painting of the courthouse was awarded to Mark Smith, by the Martin County commission at a bid of \$841.

■ Bay County Memorial Hospital

is the name to be given the proposed Bay County Hospital by the board of county commissioners. The designation is in honor of men in the county who served in the armed forces during the present war.

■ Polk County commissioners have approved a list of approximately 100 miles of road in Polk County for building or reconstruction. The roads will be given priority in the Federal-aid system of roads in Florida.

■ Pinellas County commissioners have challenged figures by the Pinellas County aviation advisory committee reporting its claim that the Pinellas master airport can be operated profitably as a commercial air terminal. The county commissioners plan to meet with the advisory committee to study statistics.

■ Two additional assistants in the Hillsborough County extension service have been requested by Alec White, county farm agent. He appealed to the county commission to provide funds for employment of two assistants—one who would specialize on soils, and the other to specialize on livestock.

■ Bay County commissioners have applied for a permit to construct an earth fill dam and spillway on Martin Bayou, an arm of St. Andrew's Bay, at Bay Harbor to create a fresh water lake for fish propagation and to exclude paper mill waste.

■ The Pinellas County commission has deferred action on a request for a \$2,500 appropriation to finance the county service office pending an agreement by veterans organizations in the south end of the county.

■ Calvin J. Reams, chairman of the Jefferson board of county commissioners passed away at a Valdosta hospital on June 20. He was a prominent farmer in the Lamont section and also owned a store.

■ Highlands County commission has been asked to invest \$10,000 in the purchase of lands for the establishment of the South Florida

Hospital, two miles south of Avon Park. The city of Avon Park will be asked to participate in the purchase to the extent of \$15,000.

■ Resolutions favoring a county health unit have been adopted by the St. Cloud Business Men's Club. They were sent to the county commission, the school board, and the St. Cloud city commission.

■ County Commissioners Preston B. Bird and N. P. Lowery accompanied by their engineer, Earle Rader, went to New York and Washington to confer with necessary officials in those cities on several public works projects in Dade County.

■ W. T. Foley has been named county plumbing inspector by Escambia board of county commissioners.

■ Dade County and the city of Miami each have given \$5,000 to the Everglades National Park Association. The association is carrying on a program designed to bring about the completion of the Everglades as a national park.

■ Leon County commissioners have awarded \$4,444 contract for the installation of an oil-burning steam heat system in the county courthouse. The contract calls for installation within three months.

■ The Palm Beach County commission has approved the leasing for one year of a building in Lake Worth to be used as a community canning center.

■ Approximately 100 miles of feeder or secondary roads approved for road building have been laid out by the Santa Rosa County commissioners.

■ Although approving plans of the Junior Chamber of Commerce for a proposed juvenile delinquency home, Escambia County commissioners asserted that funds are not available now for construction or maintenance of the project.

■ The remapping and valuation project for Live Oak, sponsored by the city council and the Suwannee County commissioners, is progressing satisfactorily. The project is

(Continued on page 41)



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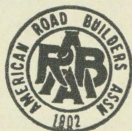
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# FLORIDA FOURTH ESTATE

## The Governor Adds It Up

**I**N HIS MONTHLY radio report to the people of Florida on Monday night Governor Millard F. Caldwell commended the 1945 legislature for doing what he called "a grand job on the whole." It was not the first time he had patted this session's lawmakers on their collective back; early in the session he called this legislature one of the most conscientious and hard-working which the State had ever had.

These compliments were earned and deserved. But there is one thing which Governor Caldwell could not say about the recent regular session and which must be said for him. That is that no small part of the legislature's accomplishments was the direct result of Mr. Caldwell's expert strategy, of his ability to use the executive power to its fullest without exceeding its limitations, of his firmness, clarity, and unquestionable integrity.

Take, for example, the question of the State's post-war "nest egg." The governor in his opening message had laid it down as axiomatic that the sizable balances in the treasury should be preserved and that current costs should be met out of current revenue. But that in itself was not enough. His early strictures might well have been completely disregarded—indeed, there were moments when it seemed as though they were to be forgotten—if it had not been for the warm, human relationship which Mr. Caldwell maintained all through the session with his supporters, and the obvious inspiration which he gave them to go into their respective chambers and carry the fight against some pretty savage attacks. It is characteristic of Millard Caldwell that, in adding up the results, he should assign full credit to the legislators. The people, however, will divide the credit more equitably.—Pensacola Journal.

## The One Serious Omission

**L**IKE GOV. CALDWELL, we think the one big error of the legislature was its failure to enact a measure to set up State control of the fresh-water resource, which is now rapidly being depleted by wasteful methods.

As the governor points out in a statement regretting this legislative omission, the progressive gravity of the situation endangers our agriculture and contributes to the rapid waste of our rich soil in the Everglades which is vanishing swiftly and will continue to do so until proper controls are established.

This measure could have been passed and completed if it had been efficiently guided, for a bill passed the senate in a weakened form, was strengthened in the house and went back to the senate too late

for concurrence, showing that the lawmakers are favorably disposed.

Two years hence the lawmakers will again assemble for general legislation, and the friends of water conservation and control should make sure that this time an adequate law shall be enacted and that the proper measures to protect the resources shall be assured.

There are some who think the danger of a water shortage in Florida is exaggerated, but the plight of many coastal cities, the progressive lowering of lake and underground levels and the growing need for water cannot be so easily brushed aside.

Engineers and technicians have agreed that proper control measures would not only halt the depletion of our water stores but would actually build them back to a safer reserve without interfering with proper uses of water but providing more for all uses.

Accordingly the two years intervening between now and the next regular session should be utilized in further study of the problem and in arousing more public sentiment in favor of competent administration of this indispensable resource.

We don't know of any selfish or private interest that would be injured by the right administration of the resource and we are confident the whole State would benefit by it, while if it is not established the whole State will suffer irreparable and perhaps permanent injury.

We want to assure Gov. Caldwell that this newspaper stands squarely with him in his purpose to set up a State control for water and to urge it on the lawmakers as their unfinished duty which they cannot again ignore without tremendous damage to Florida.—Orlando Sentinel.

## Abuse Is Not An Argument

**A**BUSE IS NOT an argument. That is a time-worn statement, and its truth has been established by time, yet many of us forget that circumstance and assume the attitude that the more we malign a person the more forceful is our argument.

A few days ago The Citizen received a reprint of an editorial that attacked Governor Caldwell because of his insistence in fattening still more the State's surplus bank roll at the expense of the taxpayers.

There was sufficient room in the charge for the writer to prove his case calmly by adding fact upon fact, but he begins his article by declaring:

"The greatest tax hog that has governed the State of Florida since this writer came here 33 years ago is Governor Millard F. Caldwell."

Denouncing him as a "tax hog" implies that he intends to nuzzle into govern- (Continued on page 42)



## INDUSTRIAL RESEARCH

(Continued from page 19)

the Engineering and Industrial Experiment Station on war projects, contracts were let to industries which amount to several hundreds of millions of dollars. Florida industry did not get those contracts because Florida industry did not prepare sufficiently in the thirties to be ready for this emergency. It is hoped that Florida industry will not slump into the doldrums after the war, but will continue to progress. The sign of progressive industry is interest in research and contribution to research. The goal of every industry in the State should be 2% of its gross receipts for research. In some cases that research should be done in its own plant; in some cases the research should be done at a central laboratory such as an engineering experiment station. In other cases the research should be a combination of the two. In any event, for its own preservation 2% as a minimum should be set aside for research, charged against the expenses of that business the same as any other manufacturing cost. The industry which does not pay for research dies, just as surely as the industry which uses up its equipment without providing for replacement of worn-out machinery with new.

## FLORIDA INDUSTRY IS READY

(Continued from page 15)

are in Pensacola's backyard, choice sites for paper mills are plentiful and the labor picture is good.

Linoleum manufacture — Armstrong Cork Linoleum Company makes insulating boards from Newport products which, if not utilized that way, would be cast away. The chemicals and the materials for the manufacture of linoleum are available right at Newport Industries and Newport would welcome such an affiliated industry.

An example of a small industry that really "went to town" was cited by Mr. McCormack in the Florida Drum Company, which established a small factory near the site of Newport Industries a few years ago and now employs 100 men who make 35,000 drums for

Newport annually, not to mention thousands that have been turned out for military and naval purposes. Newport, incidentally, came to Pensacola in 1916 and now occupies 30 acres with about 40 buildings. The company started out processing 150 tons of wood a day, now processes 500 tons a day.

Luggage manufacture — This could be another of the many off-spring from the mahogany business of Weis-Fricker. Discovery of new plastics and plywoods and the development of synthetic resin will provide hundreds of new uses for mahogany. Weis-Fricker, like Newport, will welcome any affiliated industries.

Cigar making—Again "local resources" come into the picture. An average of 14,000,000 pounds of to-

bacco is grown in north Florida each year. Two types of leaf are produced, bright leaf and Sumatra, the latter much in demand for cigar wrappers. The labor angle also figures in this industry, with a plentiful supply available in normal times.

The industries and the men in Pensacola who count—Municipal Advertising Board, Chamber of Commerce and city officials, are

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sincerely interested in attracting new—small or large—industries to Pensacola. In some instances, it is possible that the small business man who lacks enough capital to establish himself in Pensacola may find that financial assistance is obtainable.

Pensacola is definitely awake to its opportunities and means to go places.

No attempt has been made in this issue to present a complete outline of Florida industry or to mention by name all the larger and more important businesses that will employ labor and contribute to the economic soundness of the State after the war. Typical examples have been chosen to show the general trend.

It would require much more space to mention the shipyards at Panama City and elsewhere, the pulp and paper mills scattered from Fernandina to Pensacola, the vast food processing plants, including citrus packing plants, canning plants, juice and concentrates plants, and the allied food machinery business typified by the Food Machinery Corporation. Florida has a large number of unique manufacturing businesses, such as the artillery shell pad plant, Palm-tex Corporation at St. Petersburg, and the knock-down house construction by Dooley's Basin and Dry Dock at Fort Lauderdale.

Florida enterprise has uncovered many exceptional opportunities. Other opportunities, just as great, await development.

#### FLORIDA INDUSTRIALLY SOUND

(Continued from page 23)

base for salt-resisting paints. The peel also contains pectin which is used in the bakery and candy trades, and is also used as a sizer for paper and cloth, as a casehardener for steel, as a concomitant of blood plasma, and in certain roles in munition making. Ground and dried, the roughage left over after the extraction of oil and pectin from the peel, makes good cattle feed.

Citrus molasses, made by concentrating sugar-rich waste liquids, is used to enrich cattle feed and is used by fruit distillers for

potable alcoholic drinks and by breweries as raw material for synthetic meats.

The "rag," between pulp and peel, when combined with the roughage, has been found useful as a base for plastics. The seed of the fruit produces an edible oil, a base of vegetable cooking fats, and a dyeing mordant for artificial silks.

Florida's citrus industry has indeed grown far beyond its bewildered adolescence of the mid 1920's. As for the future—research chemists have listed 32 products that could be manufactured from citrus fruit, none of which are on the market today.

#### CATTLE INDUSTRY . . .

Contemporaneous with the increase in numbers and improvement in quality of the cattle, and the pasturage improvement program, has been the introduction of locally produced finishing and fattening feeds. Byproducts of the citrus canning and concentrate and

sugar industries have been found to be rich in vitamin content and ideally suited for processing into cattle feeds.

Roughage left after the oil and pectin has been removed from the citrus peel makes good feed. Citrus-cattle-cake processors active in Dunedin and Dade City find a

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ready market. One plant enriches its cattle feed with citrus-molasses, stiff with vitamins.

The United States Sugar Corporation at Clewiston has conducted successful experiments in the feeding of beef cattle, using "blackstrap" molasses and lemon grass, a vegetation peculiar to Florida's Everglades, as a feed base. To this base is added a small percentage of high grade protein supplements in the form of cottonseed, peanut or soy bean meal, all Florida products, and the usual mineral supplements.

Although Florida's cattle industry has progressed at an amazing pace over the past two decades it is still young. As a consequence there has not yet been time to fully exploit the possibilities of industries using the byproducts of the cattle business. Hides, fertilizers, leathers and leather goods, tinned meats and meat products are all possible of production on a large scale as the local supply of cattle byproducts increases.

A tannery, for example, would have access not only to the hides but to an area in which trees rich in tannic acid could be grown. In 1924, the U. S. Bureau of Foreign & Domestic Commerce reported that Florida was one of the few States in the United States which possessed characteristics essential to profitable Wattle culture. The Black Wattle is a principal source of tannic acid.

#### PULP AND PAPER . . .

Florida's forests yield between \$40,000,000 and \$50,000,000 a year, employ 70,000 and furnish a living to approximately 350,000 people. The naval stores industry in Florida dates from Colonial days. The wood-container industry has kept pace with the increasing demands of the vegetable and citrus fruit growers. These facts are generally known to students of Florida's resources. However, not so generally known is the fact that Florida has a new and profitable industry that has shown remarkable growth in

less than a decade. This is the pulp and paper industry, which was nonexistent prior to 1930 and which in 1943 had a payroll of \$8,500,000.

Until the late 1920's, it had been assumed that only the pitch-free conifers of the North, spruce, fir, and hemlock, could be used for paper manufacture. The highly resinous Southern pine of which millions of acres grow in Florida, was considered incapable of producing dissolving pulps. The gradual depletion of Northern forests, however, gave impetus to the search for an inexpensive method of making the slash pine resources of the Southeast available for paper manufacture. Chemical research finally developed processes for pulping Southern pine by both the sulphate and sulphite methods.

The greatest demand for paper is for the tough wrapping paper known by the trade name of "Kraft." This kind of paper is

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most readily made from the pine pulped by the sulphate method. The requisites of a kraft paper mill are: (1) a nearby supply of pulpwood; (2) an adequate supply of fresh water; (3) low-cost fuel and power; (4) supplies of sodium sulphate, or of salt and sulphur within low-rate transportation distance, and (5) transportation facilities for distribution of the product at a low freight rate. All of these elements are found in north Florida.

The first paper mill in Florida was built in 1930 by the Southern Kraft Corporation, a subsidiary (now a division) of International Paper Co., at Panama City, for the manufacture of Kraft Fourdrinier and corrugated paper board. Other companies soon entered the field and by 1943 the following plants had been erected and were in operation in Florida:

Container Corporation of America, Fernandina—Unbleached sulphate wood pulp.

Florida Pulp & Paper Company, Pensacola—Bleached sulphate paper.

International Paper Co.,—Southern Kraft Division, Panama City—Kraft Fourdrinier and corrugated paperboard.

Miami Mills, Inc., Miami—Pulp goods, converted paper products.

National Container Corporation—Kraft Pulp & Board Division, Jacksonville—Kraft pulp, Fourdrinier kraft liner, paperboard containers and boxes, corrugated shipping boxes.

Rayonier, Inc., Fernandina—High alpha bleached sulphite wood pulp.

St. Joe Paper Company, Port St. Joe—Kraft pulp, corrugated board, line board, crude tall oil, rosin soap.

Santa Rosa Pulp Company, Pensacola—Under construction as of Sept. 30, 1944.

Most of the companies in the above list pulp the Southern pine by the sulphate method, the method for making tough wrapping paper. Rayonier, Incorporated, how-

ever, in December 1939, opened the first bleached sulphite mill in the South at Fernandina. This represented the newest development in sulphite pulping, the successful commercial production of dissolving pulps for rayon, staple fibre, cellophane, and plastics, from Southern pine. The addition of Southern pine to the woods capable of producing dissolving pulps is of prime importance to the industries dependent upon them, particularly the rayon industry as most of the rayon spinning plants are located in Pennsylvania, Virginia, West Virginia, Delaware, Georgia, North Carolina, and Tennessee, all nearer to northern Florida than they are to other sources of the raw material. This development at Fernandina is also of considerable importance to Florida, for it suggests the possibility of plants being erected in Florida to

process the dissolving pulps locally into rayon, staple fibre, cellophane, and plastics.

Concerning a possible post-war decline in demand for the products of the pulp and paper industry as a whole, the following comment was made in the September 30, 1944 Monthly Review of the Federal Reserve Bank of Atlanta:

"It seems unlikely that total demand will not fall somewhat at the end of the war, but the expe-

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rience of the Southern branch of the industry seemingly will differ from that of the industry as a whole. In the first place, Southern plants are newer and larger, and have lower unit costs than the average plant in the country, and, in the second place, the development of successful processes for bleaching sulphate pulp makes it likely that the paper industry will continue to move South so that the fall in production will probably be concentrated in the Northern plants. Another favorable factor, at least so far as Southern plants are concerned, is the increasing stress upon attractive packaging. Kraft paper and paperboard made from pine pulp thus have a bright future in the development of new outlets for packaging materials in post-war America."

Another Southern advantage, pointed out earlier in the above Review, is that "Southern mills do not have to maintain a large stock of pulpwood because they can get deliveries the year around. Northern mills, on the contrary, cannot ordinarily get wood out of the forests during the winter months and hence must maintain huge inventories. Maintenance of inventories involves interest costs and in addition involves expensive insurance premiums against fire."

#### MANUFACTURES . . .

Although the annual value of Florida's manufactures has been about \$250,000,000, and nearer \$300,000,000 during the war years, the manufacturing phase of Florida's development has not been as spectacular as those previously discussed. Wartime industrial demands, however, have attracted many established industrial concerns and investor groups toward Florida because its vast raw material resources, its 8,000 miles of paved roads, 7,500 miles of railroad trackage and numerous good ports hold great promise for profitable domestic operations and development of South American trade.

The following is a partial list of the manufactures for which Florida can supply material:

Glassware, chinaware, insulation materials, canned goods, creameries, phosphate mills, cotton goods, tile, filters, paper, roofing, cement,

furniture, porcelain, fish products, buttons, leather, awnings, tents, dairy and poultry feeds, plastic products, cosmetics and toiletries.

The Florida Everglades offer unlimited raw materials for manufacturing. Lemon grass produces an oil base for perfumes and the dried grass then makes cattle feed base. Fibrous plants such as ramie offer textile and cordage possibilities. Medicinal, condiment, flavoring, spice, and essential oil plants, flowers and roots flourish in great number. Vegetal materials can be reduced by various processes for production of various alcohols, their esters, ethers, and ketones. Hundreds of products are possible where these items constitute one or more of the principal ingredients. Similarly numerous articles

can be manufactured from the cellulose obtained from various sources in timberlands, wood lots,

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sugarcane and other vegetation.

Florida's geographical, production, health, and climatic advantages were early recognized by the United States government in developing its war program. In shipbuilding, for example, Florida yards have the advantage in that mechanics can work nearly every day in the year without discomfort. Florida also enjoys the additional advantage of proximity to the steel mills in the Birmingham district and in other Southern locations which manufacture the parts of vessels for assembly in Florida. Yards in Jacksonville, Tampa, Panama City, and Miami were expanded tremendously and employed thousands of workers. Payrolls of Florida manufacturers increased over 85% during the war period and more than 65% was in the highly paid shipbuilding industry.

Airplane construction and the manufacture of aircraft parts have also required the employment of thousands of Floridians. At least six plants in Miami, Miami Springs, Orlando, Fort Lauderdale, and DeLand have been actively engaged on government contracts. For this industry Florida has advantages over other areas based upon climatic conditions and the possible number of working days in the year for the manufacture and testing of planes.

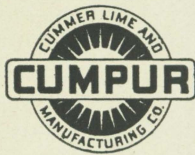
Although the end of the war will cause the termination of considerable shipbuilding and aircraft construction activity, the presence of these industries during the war years has given Florida an additional advantage. That is the creation of an entirely new labor supply of skilled mechanics. Thousands of Floridians have been trained in all the necessary trades for building, assembling, maintaining and repairing of ships, airplanes, and other equipment. The diversion of these skills to peacetime activities can become a tremendous stimulus in the State's agricultural and industrial development.

The Manufacturers Record in April 1944 predicted "an unprecedented wave of expansion, remodeling and rehabilitation" of Southern industrial facilities "as soon as

restrictions are removed and building materials and equipment are made available."

Florida, because of its strategic location for Latin-American trade, abundance and variety of raw materials and labor, inimitable climate and abundant supply of power service, should be among the leaders in post-war industrial progress. With 1,148 miles of shore line, exclusive of bays and inlets, greater than any other State in the United States, Florida occupies a unique position among maritime States. The growing ports of Pensacola, Tampa, Jacksonville, Miami, Fort Pierce, and Port Everglades are benefiting from increasing trade with Latin-America. In this connection it is interesting to note that according to a report issued in March 1944 by the traffic manager of Port Everglades, this

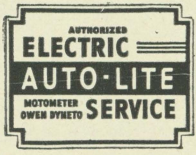
port stood third among all ports of the United States Atlantic Coast in the number of carloads of import freight handled during 1943. It was stated that New York City with 98,940 carloads and Baltimore with 31,751 were the only two ports exceeding Port Everglades in carload clearance of imports. 1943 imports for Port Everglades



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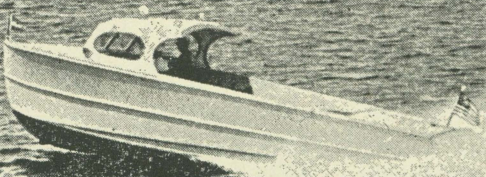
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totaled 24,102 carloads. In 1942 Port Everglades stood in sixth place.

### CONCLUSION . . .

Conditions in Florida in 1945 and those of 1925 invite contrast rather than comparison. Agriculturally, industrially, and financially Florida has grown up. There is more justification for a boom in the 1940's than there was during the 1920's. Now financially solvent and possessed of resources which have still only been partially exploited, Florida is on the way to a position among the more mature and prosperous States of the Union.

The demand for Florida's diversified agricultural products continues to grow with the years. The State is particularly adapted to the raising of certain crops and the area devoted to these is constantly growing and new varieties are being introduced. The food processing industry, a natural adjunct to Florida's agricultural economy, is growing rapidly.

The extent of and possibilities inherent in Florida's mineral resources are gaining wide recognition. It stands first in the production of phosphate, second in the production of Fuller's earth, a variety of clay used in clarifying mineral and vegetable oils and fats, and is a center in the production of kaolin, used in the manufacture of various white ware products. Florida is an important producer of limestone, lime, and cement; produces building stone from coquina, oolitic, coral, and other limestones; produces quantities of peat used directly on soils and as a filler in fertilizers; and it has large deposits of sands and clays suitable for various construction and manufacturing purposes.

There are few Florida products that have not been the subject of laboratory research in the past few years. One of the latest and most important of these is ramie, the China grass whose fibre is seven times stronger than wool, eight times stronger than cotton, four times stronger than hemp and has a tensile strength eight times that of rayon and ten times that of silk. As machinery packing it is 2½ times more efficient than any

other known material. It can be used for ropes, tarpaulins, tents, duffle bags, hammocks, paper, clothing, tablecloths, and a multitude of other fabric uses. The development of this semitropical plant, for which the soils of Florida's Everglades are ideally suited, has been delayed pending the perfection of the decorticating and degumming machines necessary for processing the plant.

Late in 1944, Florida Ramie Products Corporation, a subsidiary of Johns-Manville, purchased 5,000 acres of Everglades land from the State for the cultivation of ramie. In April 1945, the company was granted a loan of \$321,000 by the Smaller War Plants Corporation, for the construction and equipment of a ramie processing plant two miles north of Belle Glade. The parent company will buy the ramie ribbons produced at this plant and degum, wash, and

bleach them in a Northern plant. Although the acreage of Florida Ramie Products Corporation has

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not all been planted, State grown ramie will serve as a feeder until its own crop can be brought in.

Newport Industries, Inc., also has plans for a ramie processing plant at Canal Point, and an agreement to purchase the fibre from United States Sugar Corporation at Clewiston. Sea Island Cotton Mills of New York also has acreage in the Everglades as have numerous smaller planters and farmers.

The cultivation of ramie and the construction of ramie processing plants along the rim of Lake Okeechobee is one of the important industrial developments of south Florida. With the United States Sugar Corporation's sugar and starch plants at Clewiston as the foundation stone, there is evidence that a large industrial empire keeping step with agricultural development is a definite possibility for south Florida.

The \$7,000,000 starch plant of United States Sugar Corporation, now nearing completion, is designed to produce 75,000,000 pounds of high grade starches and their derivatives annually. It will consume 40 carloads of sweet potatoes daily, with a daily output of 250,000 pounds of starches; processing of potato vines and pulps will yield 125,000 pounds of livestock feed a day.

Another newcomer to the Everglades is Destileria Serralles, Inc., of Puerto Rico, which has bought 23,000 acres of Everglades land upon which it plans to expend \$5,000,000 in construction of sugar plantations, a sugar mill and a rum distillery. The transfer of this company's plant and equipment from Puerto Rico commenced early in 1945.

The fishing industry, which is the State's oldest industry and its first recreation, and which returns around \$20,000,000 annually, has also attracted the attention of researchers in food processing. A large, modern plant at Fort Myers has just been completed for cooking, cleaning, and dehydrating the fresh fish. This new industry not only provides employment and additional revenues but has a stabilizing effect on the fishing industry. In periods of an overabundant

catch the dehydrating process enables the fish to be stored, thus preventing a glutted market and the consequent depression of price.

Another step toward the further exploitation of Florida's marine resources, has been the discovery of large deposits of seaweed in the Indian and St. Lucie Rivers, rich in agar-agar, a glutinous substance used as a culture for bacteria in scientific research, as a jellying agent, and which is also used for soup stock, packing fish, and many other items. Sperti, Inc., of Cincinnati, has been granted a 10-year franchise to gather the seaweed in the Indian River from Fort Pierce inlet to St. Lucie inlet. The company has plans for the construction of a large plant for the manufacture of agar-agar and byproducts of the waste seaweed.

Recent exploration of the Everglades by rubber experts has resulted in the discovery of millions of rubber trees in this area. It has been estimated that Florida's latex

producing resources are great enough to make the Nation practically independent of imported

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rubber. While this phase of Florida's economic development is still in the exploratory stage, it has attracted the attention of State and Federal officials and tire and rubber companies.

These are only a few manifestations of the trend toward the greater exploitation and use of Florida's resources. The list is long and represents a widening of the recognition of Florida's enormous and diversified resources, incomparable climate and easy accessibility to both North and South American markets.

Underlying the list of new agricultural and industrial developments is the steady growth of Florida's tourist industry, which prior to the war accounted for approximately half of the business in the State. The war has introduced Florida to hundreds of thousands of military personnel, war workers and others who might never have seen it. And evidence is multiplying that for a few years after the war Florida will have the biggest influx of tourists it has ever had.

### Rural Schools Will Benefit By Post-War Highway Program

Rural education will receive a great impetus from the post-war highway construction program, Charles M. Upham, engineer-director of the American Road Builders' Association, told a conference of educators. Improvement of our secondary or country roads under the Federal-aid highway act of 1944 will make possible the consolidations of thousands of school districts and thus raise educational standards for farm children.

"The little red schoolhouse is all right in tradition, but it had its drawbacks. Having to trudge daily through mud, dust, or snow to reach it, impaired its value," Mr. Upham said. "All trends are now toward the modern consolidated school with pupils delivered in school motor buses, but these schoolhouses depend upon the highways. Surveys show that there are between 5,000 and 10,000 rural school consolidations that should be made, but are now impossible because of road conditions."

The engineer-director pointed out that a study made by his association in a number of representative counties showed that nearly 70 percent were still on dirt roads. "Highways are the bottleneck to the growth and expansion of the consolidated school," he said, "but under the post-war program of over a billion dollars a year for construction purposes, more than

\$300,000,000 will go for farm-to-market roads. This is a good start on pulling out of the mud."

Mr. Upham held that even when the consolidated school could not be built at once, absences would be materially cut and the general tone raised in district schools by improving the highways on which they were located.

"America has 2,400,000 miles of rural roads serving 6,000,000 farms, but only 45,000 miles have a high type pavement and 99,000 miles have a low-type bituminous surfacing," Mr. Upham went on to say. "The rest of these country highways—2,262,000 miles have a nontreated surface, are merely graded and drained, or are simply trails. When we consider the millions of farm children that must use such roads, the

need for giving attention to our highways strictly from an educational angle becomes apparent."

He concluded by saying that improved country roads were also important for the rapid and regular delivery of farm products to market, the reduction of costs in car and truck operation over improved highways, the delivery of mail, and greater accessibility of the larger centers for shopping and pleasure trips.

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## COUNTY ACTIVITIES

(Continued from page 29)

designed to clarify and adjust all assessments and descriptions. George G. Ehrenborh of Dallas, Texas, a specialist, is in charge of the work.

■ Union County commissioners have put up cash prizes to be awarded in a food canning contest staged in that county.

■ Hillsborough County Commissioners have accepted a bid of \$4,040 for installation of new radio equipment for the sheriff's office. General Electric Supply Corporation made the bid.

■ The Broward County commission has approved a plat for MacArthur Park, which will be a new subdivision located in Fort Lauderdale.

■ Seminole County commissioners have recommended that \$10,000 be included as an item in the forthcoming yearly budget to be used in connection with the purchase of land for a State Agricultural Experiment Station. The project already has been approved by the legislature. The 28-acre Hickson farm has already been approved as a site for the vegetable experiment station.

■ Hillsborough County roads were damaged to the extent of several thousand dollars as the result of torrential all-time record rains early in July. County Commissioner Moore said 47 bridges in his district were washed out or damaged.

■ The over-all plan of road construction and maintenance is making progress, Chairman J. P. Bush of the Holmes County commission, has reported. A recent meeting was devoted to the outlining of a system of 100 miles of unsurfaced roads in the county to be made the recipients of a new Federal plan providing funds with matched money from the county.

■ Duval County commissioners declined to take any action on a request that funds be provided to assist in the maintenance of the county's legislative delegation attending the extraordinary session on reapportionment.

■ St. Johns County commission has been petitioned by the city of St. Augustine to levy a tax to produce revenue for use of repairing and maintaining city streets. A tax levy to produce \$10,000 has been requested.

■ Palm Beach County officials, assisted by Henry F. Lilienthal, county attorney, scheduled a meeting to discuss just how the county pension law will affect county employees.

■ Orange County commission has added \$20,500 to its tentative budget. The funds are to provide for projects

approved by the recent session of the Florida legislature and include \$7,500 for water hyacinth control.

■ Lee County has agreed to underwrite its share of the estimated \$62,000 needed to purchase right-of-way for the coastal waterway from the mouth of the Caloosahatchee to Tarpon Springs. The board of county commissioners took action after investigation of the project.

■ Indian River County plans to initiate a "Pay as you go" basis road program during the post-war period. It is proposed to construct 21 miles of mixed-in-place type pavement where the need is most critical.

■ County Commissioner Lee Hanchey of Hardee County, has announced that Heard Bridge road has been closed for about 10 days in order to make necessary repairs. Recent rains washed out the east end of the river bed and at the same time damaged the bridge.

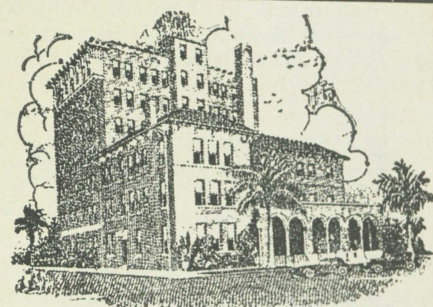
■ Strong resolutions were adopted by the Miami Beach Chamber of Commerce and Miami Beach Rod and Reel club criticizing the Dade County commission for lack of water control legislation. Acting county commission Chairman Hugh Peters replied that the commission was aware that "two self-styled conservation authorities have been urging citizens of this area and some of our civic clubs to build fires under the county commissioners to get them to act now."

■ Broward County commissioners have

assured the State guard unit at Ft. Lauderdale of their interest in the construction of a State armory building.

■ County Commissioner Frank Bentley of Lee County has protested to the assembled commission regarding the condition of the county courthouse. He maintained that the captain of the prison guard spends little of his time attending to duties.

■ Columbia County commissioners assisted in the recheck made in that county as the result of census figures



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which showed population had decreased some. At a recent meeting the same board awarded a sum of money to meet the expenses of transportation of 16 negro boys and girls to Tallahassee to attend the 4-H Club course.

■ The banks designated as county government's official depositories of Pinellas County are all the larger banks in St. Petersburg, the First National Bank and Bank of Clearwater, the Bank of Dunedin, and the First National Bank of Tarpon Springs.

■ Monroe County commissioners have been requested to increase to \$200 the amount of county funds contributed to child welfare work in Key West.

■ An application of asphalt and rock was to be placed on the Main Street bridge connecting Daytona with Daytona Beach, according to an announcement by County Commissioner Elmer Blank.

■ County Road Superintendent R. L. Hayes has been instructed by the St. Lucie County commissioners to estimate the probable cost of construction of a 12x24-foot building on the north lot of the courthouse to provide office space for the county supervisor of registration and justice of the peace.

■ C. W. Rogers of Weirsdale, has been appointed a member of the city-county hospital board, which administers affairs of the Monroe Memorial Hospital. The action was taken by the board of county commissioners.

■ Gainesville Chamber of Commerce intends to sound out public opinion on a suggestion that the Alachua board of county commissioners be requested to provide in their next budget a sinking fund for post-war building.

■ Indian River County commissioners have accepted a recommendation by the Chamber of Commerce regarding the proposed establishment of a beach park bathing beach, and housing project for colored people.

## FLORIDA FOURTH ESTATE

(Continued from page 31)

mental pap, which, everybody who knows Governor Caldwell is aware is not true. He will not profit by an increase surplus, and he has stated he has in mind post-war projects that the State intends to undertake.

The Citizen believes that there was no necessity, in almost all cases, to increase the tax burden in Florida, because the public's pocketbook undoubtedly will become leaner and leaner as the wartime boom decreases, resulting in the tax burden becoming more acute when there is no longer "easy money." But because that is the Citizen's attitude, it would not resort to abuse in striving to maintain it.

Besides, as we read the article, the more we read the more confident we felt that it was propaganda against a

certain matter that the governor has favored. Briefly, the writer mentions some of the increased taxes, then devotes the remainder of the article to opposing something that the governor views with favor.

It was said of Lincoln, particularly during his debates with Douglas, that he admitted the truths of so many things his opponent said there appeared little opportunity for his driving home what he wished to say and, thereby, gain his point. But he always did, and, while he was leading up to his climax, he spoke of his opponent in a kindly vein, because Lincoln was one of the many thousands who have said, "Abuse is not argument."—Key West Citizen.

## Water Problem Our Own

NOW THAT Governor Caldwell has turned the water control situation over to Broward County we're expecting the county commissioners to roll up its sleeves and commence work immediately. There is no time to lose as the threat has grown to such a proportion that it is almost unbelievable.

If the commission is of the opinion we are crying wolf we suggest they trek over to the west coast of the State where 1,000-acre watersheds are already under construction. Those people are going to be prepared for the next drought!

While on the subject of water control and Governor Caldwell we call attention to the tongue-lashing dealt the voters of this State by the chief executive in his radio address. He

used words of our own choosing when he said:

"The responsibility for this failure (the water control bill's defeat in the senate) rests, not so much upon the senators who opposed the bill, as it does upon the carelessness of the people in the counties and districts which elected them. The voters get what they want if they speak loudly enough to be heard!"

## FT. MYERS BUILDERS SERVICE

LUMBER & BUILDING MATERIAL  
Phone 86—P. O. Box 229

## RECAPPING

One of South's Most Modern Plants.  
Large Stock. Used and New Tires

HUMPHRIES TIRE & RETREADING  
COMPANY  
Fort Pierce, Florida

## ROCK FOR EVERY PURPOSE

|                   |        |
|-------------------|--------|
| Concrete Rock     | \$1.30 |
| Screenings        | 1.00   |
| Sand              | 1.00   |
| Pea Rock          | 1.50   |
| Rice rock (chats) | 1.50   |
| Road rock         | .85    |

## Naranja Rock Company

Capt. T. H. Newman, Owner

Phone Homestead 573

## MOTOR SUPPLY & EQUIPMENT, INC.

19-25 W. Broward Blvd.

Fort Lauderdale, Florida

Automotive Parts - Equipment

Industrial Supplies

M. D. Taylor, Pres. R. P. Taylor, V. Pres. & Treas. C. R. Straughn, Secy

MAIN STORE—212-16 E. Three Notch St.—ANDALUSIA, ALABAMA

## TAYLOR PARTS & SUPPLY CO., Inc.

Distributors of AUTOMOTIVE SUPPLIES, TOOLS & SHOP EQUIPMENT  
BRANCH STORE—PANAMA CITY, FLA.—H. F. Moore

## MILLS ROCK COMPANY

of Miami, Inc.

MIAMI



FLORIDA

## Cleary Bros. Construction Co.

General Contractors

West Palm Beach

Florida



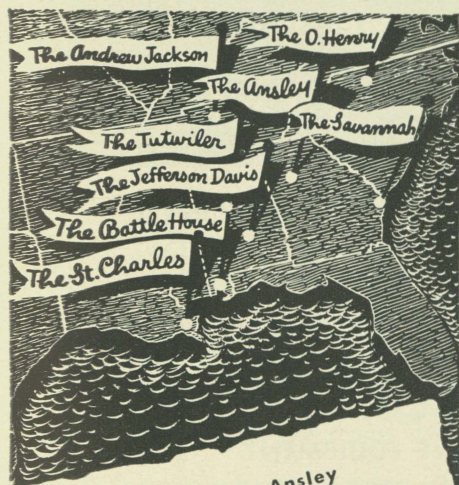
That's what we term as calling a spade a spade.—Ft. Lauderdale News.

### Sanatoria Vetoed

IT IS MUCH TO be regretted that Governor Caldwell has vetoed the appropriation for four new tuberculosis sanatoria which were to have been constructed in various sections of Florida. Additional facilities for the treatment of TB are urgently needed in this State, and the two years before the next session is a long time to wait before initiating a real program of sanatorium construction.

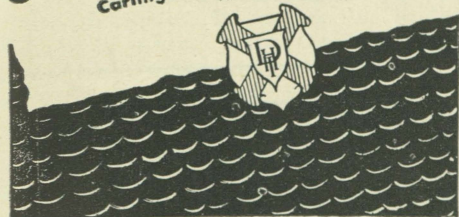
Nevertheless, one cannot help admiring the strength of character shown by the governor in carrying out his promise to veto the measure. The governor is in favor of the sanatoria but had stipulated that the measure would not get his approval unless the legislature provided additional revenue equal to the appropriation. That revenue was not forthcoming, and the governor obviously meant what he said.—DeLand Sun-News.

Crossing your fingers for good luck won't keep them from getting cut off.



ATLANTA The Ansley  
BIRMINGHAM The Tutwiler  
MONTGOMERY The Jefferson Davis  
MOBILE The Battle House  
NEW ORLEANS The St. Charles  
NASHVILLE The Andrew Jackson  
SAVANNAH The Savannah  
GREENSBORO The O. Henry

**Dinkler HOTELS**  
Carling Dinkler, President  
Carling Dinkler, Jr., Vice-President  
(In Service)



### FLORIDA FACES FORWARD

(Continued from page 4)

grass, and other flora open up new industrial fields.

Research to find new uses of materials and new methods create new opportunities. Advertising will bring in new enterprise. With what we have in the way of capital, managerial ability, materials, methods, and labor great things are already being done and greater are in prospect.

The future of Florida's industry is bright indeed.

Remember when there was a rumor that Hitler was going to fly to Japan for safety?

## WHY PAINT MANUFACTURERS SHOULD LOCATE IN FLORIDA!

### FLORIDA HAS THE NATURAL RESOURCES

### of MINERAL PIGMENTS

### for Paint Making

### Mineral Pigments, Extenders and Fillers Abound in Florida!

Florida, where nature has been so generous, is rich in deposits of ochers and limonitic clays, essential in the production of paints. Here, too, are large quantities of high calcium limestone, silica sand and diatomite, valuable as extenders and fillers. These deposits are usually close to Florida's ocher and limonitic clays, sometimes being available in the same pit.

#### Analysis Shows . . .

. . . that Florida's ochers and limonitic clays are entirely suitable for the production of paints.

. . . that these deposits are easy to mine.

. . . that processing in many instances involves nothing more than washing, screening out coarse particles and drying. Hammer mills and jaw crushers handle the rest. Top soil over the deposits is easy remove.

. . . that a ready domestic market exists for such paints as would be produced.

. . . that conditions of labor, transportation and future prospects are right.

FLORIDA'S INDUSTRIAL EMPIRE OFFERS A PLACE FOR MANUFACTURING OF PAINT. For further information, write the Industrial Development Department, Florida Power & Light Company, Miami, Florida.

FLORIDA POWER & LIGHT COMPANY

Our investigations indicate that the profit possibilities in the manufacture of paint in Florida merits your careful and immediate investigation.

### IT HAPPENED IN FLORIDA

(Continued from page 27)

charging a resident with reckless operation of a boat while under the influence of liquor.

★ Hunters in the Aripeka swamp bagged a 358-pound mama bear and are scouring west Pasco County area for 30 to 50 other bruins suspected of raiding farmers' pigpens.

★ A Kansas City visitor to St. Petersburg located the grave of Almon B. Strowger who spent decades working on an automatic telephone he patented but never derived any financial benefit from.

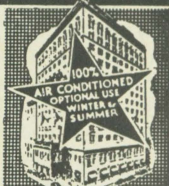
The nastiest thing in the nicest way. Diplomacy is to do and say

## 5 KLOEPPEL Hotels in FLORIDA

### JACKSONVILLE

#### Hotel GEORGE WASHINGTON

300 Rooms with Bath and Shower.  
The Wonder Hotel of the South. Radio and every known facility for first class operation.  
GARAGE in direct connection with lobby.  
RATES...from \$3.00

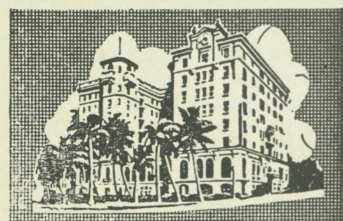


#### Hotel MAYFLOWER

300 Rooms with Bath and Shower.  
Famed for its hospitality and favored alike by Winter visitors and Commercial Travelers. Radio. GARAGE in direct connection with lobby.  
RATES...from \$2.50

### Hotel FLAGLER now in War Service

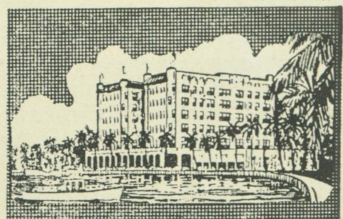
### WEST PALM BEACH



#### Hotel PENNSYLVANIA

—formerly The Royal Worth—

300 Rooms with Baths and Showers  
Open all the year. Outstanding hotel service and modern conveniences for discriminating guests.  
GARAGE service.



#### Hotel GEORGE WASHINGTON

200 Rooms with Baths and Showers  
Open all the year. Radio and every modern convenience and service for summer and winter comfort.  
GARAGE service.

★ Reasonable Rates Posted in Every Room  
**ROBERT KLOEPPEL MANAGEMENT**



## IN SEARCH OF ENTERPRISE

(Continued from page 25)

ment analyzes Florida's share in the rapidly developing and expanding plastics industry, which seems to be on the threshold of a tremendous growth.

Florida's forest and agricultural lands fit well into this industry which uses wood derivatives and byproducts, cotton seed husks, cane, grain husks,



citrus pulp, and palmetto. Scientists have shown that Southern pine yields cellulose, acetate, cellulose nitrate, rayon viscose, transparent cellulose, and lignin, all of which are important in plastic production. Turpentine and rosin are sources of isoprene and camphor; plant and animal proteins are used in making synthetic wool fibers, while acrylate resins can be obtained from lactic acid and butadine from corn, to mention other products of value in the plastic industry.

Kaolin and Fuller's earth, both abundant in Florida, formed the subject of an advertisement and its companion abstract in which Florida was stressed as an ideal site for establishment of plants using these substances in producing fabricating board, tile, cement products, brick, and pottery.

Another advertisement pointed out that Florida, with its large and growing citrus and vegetable industry, is a vast market for glass containers, especially since new methods of processing citrus and vegetables have been developed. Such containers can be furnished, easily, right within the State. The glass can be made from types of sand available in large deposits in certain sections of Florida. Cullet, lime, and feldspar, also used in glassmaking, are also present in generous quantities in Florida.

Still another abstract and advertisement expounded the possibilities of using the mineral pigments, extenders, and fillers which abound in Florida, in the manufacture of paint. Rutile, ilmenite, and zircon, which are also common on the Florida beaches, are used in a wide variety of products which could be processed profitably in Florida, one advertisement shows.

Other abstracts and advertisements are in the process of preparation and it is planned to continue the promotional campaign indefinitely, as the Florida Power & Light Company is firmly convinced that Florida has a bright industrial future. However, it is equally convinced that the most ef-

fective realization of Florida's industrial possibilities will come when the people of the State themselves are fully aroused to the chance for greater industrial prosperity in the State, and act to take advantage of the opportunities presented.

In each of the advertisements, the strategic location of Florida is stressed. Its nearness to the markets of South and Central America is shown and the point brought out that the point of shipment is the point of sale. For certain products which can be shipped by air, Florida's proximity to foreign markets is of vital importance.

Florida's unsurpassed climate is another advantage stressed. The equable climatic conditions can be reflected in working conditions as well as plant construction. Florida's population is ideally adapted to fit in with the industrial needs. Its great air lanes are supplemented by ample rail, highway, and sea transportation. Large reserves of power are available in every part of the State served by interconnected power systems. Ready availability of attractive sites is another important factor.

Backing up its own belief in Flor-

ida's future by preparing now for a great post-war influx in population and launching of new industrial ventures, Florida Power & Light Company has already started work constructing two large new power generating stations. One of these stations is located in Sarasota and another in West Palm Beach. Many miles of transmission lines are being constructed and others are projected. Other improvements are also being considered, for "Forward With Florida" is truly the motto of Florida Power & Light Company.

July is the danger month for 5-24 year olds. In 1943, over 12 percent of the annual total of accident deaths for this age group occurred in July.

A Complete Line in Every Department

**MIAMI PARTS & SPRING CO., Inc.**

35 to 99 Northwest Fourth Street  
Miami, Florida

Affiliate: Berner-Pease  
Miami, Florida

Affiliate: Auto Parts & Equipment  
Company

Fort Lauderdale, Florida  
Affiliate: Motor Parts & Equipment  
West Palm Beach, Florida

## OOLITE ROCK COMPANY

PRODUCERS OF

**MIAMI OOLITE LIME ROCK—GRADES No. 1 AND No. 2**

P. O. BOX 1751

MIAMI

BRANCH OFFICES—TAMPA, FT. MYERS, WEST PALM BEACH

## SOUTHEASTERN NATURAL GAS CORP.

MIAMI, FLORIDA

FLORIDA'S OLDEST AND LARGEST BOTTLED GAS DISTRIBUTOR

## PATTEN SALES COMPANY

**COMPLETE AUTOMOTIVE EQUIPMENT**

Featuring Bendix-Westinghouse Air Brakes and B. K. Vacuum Brakes

MIAMI

824 N. E. First Avenue

FLORIDA

F. W. Mills, President

R. E. Coleman, Traffic Manager

## GEORGIA STAGES

Incorporated

ALBANY

GEORGIA

Catering to Commercial Men

DRIVE IN TO THE

Newly Refurnished

## ST. CHARLES HOTEL

BON L. HAZLEWOOD, Manager

PHONE 925

FORT MYERS, FLORIDA



## THE INDUSTRIAL EXPANSION YET TO COME FOR THE SOUTH

Florida and the South are looking forward to great industrial expansion in the post-war years. The belief that this will become possible has been based substantially on war-gained industrial experience and most recently on the Interstate Commerce Commission's order to the railroads to adjust their class freight rates to eliminate discriminatory conditions which have been unduly favorable to Eastern manufacturers in so-called "official territory."

The operation of shipyards, airplane plants, and other war production plants on a big scale has given the South confidence in its potential capacity to be an important industrial area. Actual experience in production of manufactured goods has broadened the South's industrial "know how" and increased the supply of available skilled labor.

But as progressive as popular conception credits the South with becoming under war conditions, the War Production Board has just released the results of a survey which shows pre-war industrial and manufacturing areas have kept pace and exceeded Southern progress.

The WPB has announced that despite a more than 20 billion dollar expansion of manufacturing plants, the war has left the geographical distribution generally unchanged. The survey points out that "labor supply, existing transportation facilities, housing and above all the need for top speed combined to bring about the placement of the added facilities in the pre-war manufacturing centers."

Of the over-all industrial expansion expenditures of \$20,300,000,000, about \$19,000,000,000 or 93 percent was expended in 179 previously existing manufacturing areas, the report made plain.

The true test, then, of what the South's manufacturing potentialities are has yet to be faced. The freight rate adjustment order by the ICC should eventually clear aside one great barrier to the South's growth, but the actual approach to real industrial independence for the South is going to hinge on the manner in which Southern business men go after manufacturing opportunities. The WPB report is a sharp reminder that manufacturing plants will not just pick up and come South spontaneously. They have a big investment in their existing plant facilities. It will be up to the South to prove there are advantages enough to offset the costs of shifting in order to attract old plants or stimulate the creation of new ones.

The South can have a big industrial future, but it must rise vigorously to the challenge which pre-war manufacturing centers will hurl at it.—Tampa Daily Times.

## PINE STUMP TREASURE AND OTHER FLORIDA RICHES

Take that old pine stump in your back yard . . . sort of an eyesore, isn't it? A menace, too. Once in awhile, after dark, you trip over it, cuss it. Maybe someday you'll get busy and dig it out.

Take those thousands upon thousands of old pine stumps scattered over Florida. Eyesores—aren't they? Utterly useless? On the contrary they are proving, in their own inimitable way, to be as valuable as fine gold, as much to be desired as precious jewels.

Over Pensacola way, the famous Newport Industries—which to the layman looms on the horizon like an artist's fantasy of smoking industry—have discovered ways and means of extracting more than 80 valuable products from these old pine stumps. Products which currently are playing a vital part in the winning of a war and which in years to come will contribute greatly to the health and welfare of mankind.

It would take too much space to list them, but among the products distilled from pine stumps by Newport are turpentine, pine oil, rosin, camphor, anethol, zinc resins, gloss oils, dipentene, isoprene (used extensively in the manufacture of synthetic rubber), beta terpineoil, fenchone, cymene—and so on ad infinitum.

Florida's old pine tree stumps are hauled to this amazing industry by truck, train, and boat. Every day, nearly 1,100 tons of pine stumps are fed into the grinders and prepared for extraction. The process of distilling these products from the stumps is long, complicated, and expensive. But it is paying big dividends. In 1935

chemical processing of pine stumps produced a gross profit of \$134,509.

### Leon Bass Saw Mill

**Pine and Cypress**

Phone 3640 Kissimmee, Fla.

Phone 2-3505

Road Service

**Taylor's Service Station**

**Earl's Pure Battery Service**

100 North Main St. Orlando, Fla.

**HOTEL HAVEN**  
WINTER HAVEN, FLORIDA  
"The City of 100 Lakes"

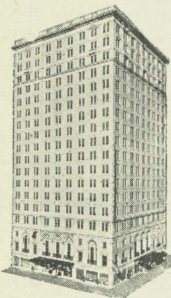
OPEN ALL YEAR  
FIREPROOF  
MODERN  
Every Room with Bath

COFFEE SHOP



CLARK B. DAVIS, Owner-Manager  
WONDERFUL WINTERS • DELIGHTFUL SUMMERS

## Hotel Floridan



Tampa's  
Largest  
and Newest

**Welcomes  
You**

J. B. Pickard, Mgr.

**Tampa**

**Florida**

## TAMPA STOCK FARMS DAIRY

VAN EEOEL DAIRY PRODUCTS, INC.

**TAMPA**

Since 1898

**FLORIDA**

## EPPELSON & COMPANY

**MACHINERY AND SUPPLIES**

"Our Twelfth Year"

Sales "EPCO" Service

PHONE 2688

130-132 South Franklin Street

TAMPA, FLORIDA

J. M. KUDER, PRESIDENT

DAVID GIDDINGS, GENERAL MANAGER

## KUDER CITRUS PULP COMPANY

LAKE ALFRED, FLORIDA

**KUDER BRAND CITRUS PULP**

IS

**Palatable - Nutritious - Bulky. Body Building and Milk Producing**



By 1944, chemical processing of stumps accounted for a gross profit of \$813,059.

This is just another example of initiative and enterprise among a group of men—small at the start—who believed in Florida, her raw materials, and her possibilities.

Another example I have in mind is the mine in South Jacksonville where a western corporation is producing vast quantities of ilmenite, rutile, and zircon for the U. S. government. Right now, these three products, extracted from Florida sand—the same as that which lies beneath the centipede grass in your back yard—are being used almost exclusively for war materials. But in days to come they will be used for divers things—including water repellent raincoats, pottery, and automobile and airplane parts.

Still another example is the experimental work being carried on in the Everglades by another huge industry in raising purebred beef cattle—a very successful experiment, incidentally, which has proven to Florida farmers that prime beef can be produced economically in this State.

And, of course, we have the experiments underway with ramie—that fine fibre which is making such a strong bid in the textile field. Thousands of acres of ramie are being grown in the Everglades and scores of chemists are studying its potentialities.

Yet the surface has barely been scratched in Florida.—Ron Sercombe in Jacksonville Journal.

## OUTDOOR ADVERTISING

State Road Department Chairman F. Elgin Bayless announced that the owner of a sign or a structure (panel or billboard) covered by the outdoor advertising law of 1941, will be required to renew the original permit or apply for a new permit October 1, to maintain it during the year beginning that date, irrespective of whether or not an advertisement of any nature or character is painted or posted on it; that upon failure of the owner to renew the permit, or apply for a permit, or remove the sign or structure, it will be removed by employees of the department and all expenses so incurred charged against the owner.

Chairman Bayless also announced that advertisements, signs and structures presently maintained in violation of the law are to be removed immediately by employees of the department, if not so removed by owners or others interested in them.

"It would be helpful, especially to owners of signs and structures, should they proceed immediately with ascertaining the highway location and the condition of each and determining for which permits will be renewed for the year beginning October 1; and, it likewise would be helpful should they proceed immediately with correcting any violation of 'set back' or other

provision of the law at the time of erecting a sign or structure, or which has since arisen due to a changed condition," William L. Hill, director division of outdoor advertising said.

During the past four years, more than 200,000 advertisements, advertising signs and advertising structures have been removed from in sight of the highways of Florida, outside of the corporate limits of cities and towns. The number removed grows larger each month. Officials of Florida cities and towns have, during the past four years, removed thousands of advertisements and signs from in sight of streets and avenues inside corporate limits.

## PROGRESS IN RECONVERSION

Reconversion prospects for Florida are highly promising and are in pace with progress of other States throughout the Nation, Ted L. Staton, district manager of the War Production Board, Jacksonville, said in reporting on a district manager's conference in Washington, D. C.

"A round-up of views from each section indicates that reconversion procedure is going forward smoothly.

P. O. Box 219—Phone 24-651  
**CASH & CARRY LUMBER  
 COMPANY, Inc.**  
 LAKELAND ★ FLORIDA

**Crenshaw Bros.  
 Produce Company**  
 Tampa Florida

**J A R S**  
 Of Every Description for  
 Honey, Marmalades, Preserves  
 Syrup and Sanitary Cans  
**LOUIS WOHL & SONS**  
 16th St. & 6th Ave. Tampa, Fla.

**TAMPA ARMATURE WORKS**  
 Electrical Repairs  
 Tampa Florida

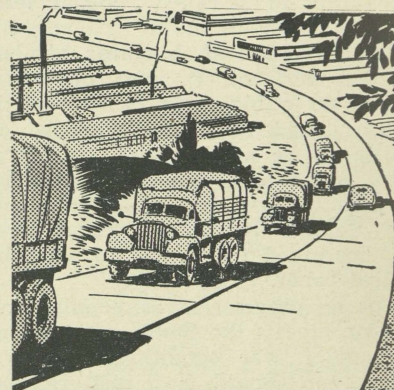
**VALENCIA GARDEN**  
 SPANISH RESTAURANT AND  
 TAVERN  
 811 Grand Central Avenue  
 Phone H-3773  
 TAMPA — FLORIDA

Over 3,000,000 Miles of Successful Long  
 Distance Moving - Cold Storage  
 for Furs and Fabrics.  
**SOUTHERN TRANSFER AND  
 STORAGE CO., INC.**  
 St. Petersburg Florida

However, the Nation's first and foremost production objective will be to meet military programs in the Pacific on schedule," he emphasized.

Staton, who saw the names of several Florida manufacturers on some of the war materiel, praised war equipment producers of the State for their outstanding record of production.

The rate of accidents on school grounds in May 1944 doubled the rate for April 1944.



*Serving and  
 conserving!*  
 maintenance-  
 thrifty  
**CONCRETE  
 ROADS**

America's 100,000 miles of concrete roads . . . because of their low maintenance cost . . . are conserving millions of man-hours of labor, countless tons of maintenance materials, large quantities of road equipment and transportation needed in the war effort.

This saving is the more remarkable because concrete roads in general carry the heaviest highway traffic.

Fortunate is the state, county or city which has built up its roads and streets with maintenance-thrifty concrete. Maintenance funds go 1½ to 5 times as far on concrete—a real economy in peacetime, a vital service in war.

## PORTLAND CEMENT ASSOCIATION

Dept. B8-37, Hurt Bldg., Atlanta 3, Ga.

BUY WAR SAVINGS STAMPS AND BONDS





Keep your "Caterpillar" pitching! Make a date now with your Dealer to have your equipment checked by qualified specialists!



## An Instrument of War Becomes A Tool of Peace . . .

When the great day of total Victory arrives—and may it be soon!—your "Caterpillar" and its allied equipment will be able to convert to peacetime production with the snap of a finger! The same job will be done

as at present—but those efforts will be used for pre-war pursuits. Truly, your "Caterpillar" is an instrument of war—soon to become a tool of peace!

Until total Victory, be sure your "Caterpillar" maintains its standard of wartime activity! . . . Make the minor adjustments that will "keep it crawling," and remember that a regular check-up by your "Caterpillar" Dealer's factory-trained servicemen is the best way to keep your equipment in fighting shape. And if needed replacement parts are not in stock, his service experts have the "know-how" to rebuild worn parts for continued use to keep your "Caterpillar" in the fight until Victory—and long after!

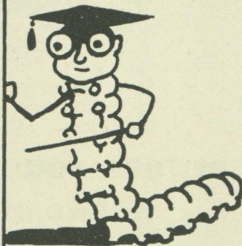
### IN THE SOUTH

**Clewiston Motor Company**  
Clewiston, Florida

•  
**Shelley Tractor-Equipment Company**  
Miami and Tampa, Florida

•  
**Burgman Tractor-Equipment Company**  
Jacksonville, Florida

•  
**Burford-Toothaker Tractor Company**  
Montgomery, Alabama



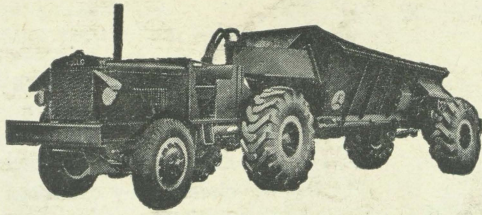
# CATERPILLAR

REG. U. S. PAT. OFF.

## DIESEL



# FLORIDA - GEORGIA TRACTOR COMPANY



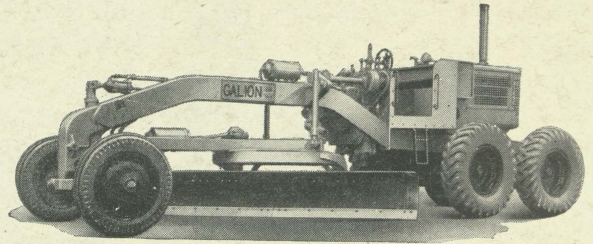
Bottom-Dump Euclid

## OF WAYCROSS GA., PHONE 116

E. A. Adams, President  
S. L. Harvey, Vice Pres.

## OF JACKSONVILLE, FLA., PHONE 7-3403

W. E. Dempsey, President  
M. C. Jones, Vice-Pres.



Galion Motor Grader

## OF LAKELAND, FLA., PHONE 4608

H. F. Mason, President  
W. G. Jewett, Vice-Pres.

## OF MIAMI, FLA., PHONE 3-7306

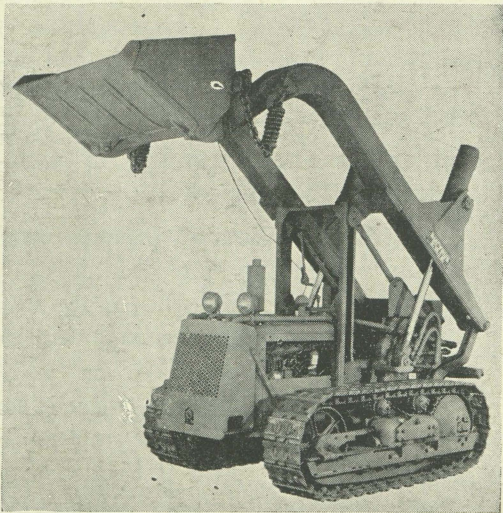
H. J. Midgette, President  
O. C. Johnston, Vice-Pres.

In addition to a sales force, we have Service and Parts Depots located at the above points in order to assure owners of International TracTracTors, Industrial Wheel-Type Tractors and Power Units receiving prompt and efficient service on their equipment. Due to shortage of experienced mechanical assistance and delays encountered in receiving parts shipments during the past few years, our service at times, has been considerably below par. As we approach more normal times and as rapidly as changed conditions will permit this situation will be corrected. Your continued patronage will be appreciated.

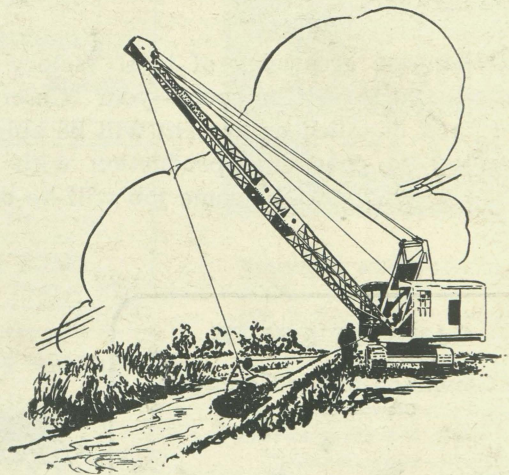
## BUILT ON SERVICE

Sales Representatives located

JACKSONVILLE, TALLAHASSEE, LAKELAND, TAMPA, ORLANDO AND MIAMI, FLORIDA  
WAYCROSS AND SAVANNAH, GEORGIA



Model TD-9 International TracTracTor and Bucyrus-Erie Dozer Shovel.



Northwest Dragline

## DISTRIBUTORS FOR:

International TracTracTors  
Bucyrus-Erie Scrapers-Bulldozers  
Northwest Cranes-Draglines  
Euclid TracTruks  
Galion Dump Bodies  
Cleaver-Brooks Tank Car Heaters  
Rogers Low-Bed Trailers  
Galion Graders-Rollers

FWD (Four Wheel Drive) Trucks  
Heltzel Bins - Forms  
Trojan Patrols-Tamping Rollers  
Murphy Marine Engines  
Gutter-Snipe Pick-Up Sweepers  
Ingersoll-Rand Compressors-Jackhamers  
Rosco Distributors  
Cedar Rapids Asphalt Plants

We also handle many other popular lines of construction and industrial machinery in addition to a complete stock of rebuilt equipment for rent or sale.